Manitoba Health

Dental Health

Community Water Fluoridation Program
1991/92

Manitoba
Health

COMMUNITY WATER FLUORIDATION PROGRAM

ANNUAL OPERATING REPORT

1991/92

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PREAMBLE

This report is a brief summary of the performance of Manitoba Health/Dental Health's Community Water Fluoridation Program for the 1991 calendar year and the final quarter of the 1991/92 fiscal year. All subsequent reports will be based on the fiscal year.

I. STATUS OF FLUORIDATION IN MANITOBA - 1991/92

A total of fifty-six (56) water treatment plants provide fluoridated water to approximately seventy-eight (78) communities with an estimated total population of over 777,000 people. This represents 72% of Manitoba's total population. Approximately 93% of the population served by a public water system, receive fluoridated water. Population statistics are based on the 1991 census figures unless otherwise indicated. Included in the above statistics are an estimated number of rural residents who consume water transported from a fluoridated water supply.

Manitoba Health/Dental Health operates a province-wide fluoride level monitoring program for all fluoridating communities. All 56 water treatment plants participated in the monitoring program.

Dental Health staff promotes water fluoridation at the community level. Promotion included initial contacts in non-fluoridating communities, presentations (both public and in-camera) to community councils and local interest groups. In addition, classroom education presentations on the responsible use of fluoride are provided in schools.

Dental Health offers a grant for communities wishing to install a fluoridation system in their communal water system. Assistance is provided in the design and selection of suitable fluoridation systems/equipment.

Training in equipment operation and maintenance, testing procedures, safety standards and monitoring protocol is provided initially to all communities. Technical assistance and support is then provided on an ongoing basis. Periodic visits are made to all fluoridating water treatment plants to ensure that continual efforts are made to achieve an optimal operating range.

MANITOBA HEALTH/DENTAL HEALTH
SUMMARY

COMMUNITIES WITH A FLUORIDATED WATER SUPPLY AS OF APRIL 3, 1992

NOTE: POPULATION STATISTICS ARE FROM 1991 CENSUS EXCEPT FOR THOSE INDICATED BY ** WHICH ARE STILL 1986 FIGURES. THE 1991 STATISTICS WERE NOT AVAILABLE AT TIME OF PRINTING.

WATER PLANT LOCATION	STATUS	POPULATION 1991 CENSUS	MINISTERIAL APPROVAL	DATES ON LINE	BACK-GROUND LEVEL	TYPE OF CHEMICAL FEED	TEST KIT	AVERAGE [F] p.p.m. 1991/92	WATER SOURCE	WATER PLANT OWNER
ALTONA	Town	3,060			0.29			1.13		MWSB
AUSTIN	Region	1,279**	-	88.12.15	0.19	NaF 4%	Ha 100	1.12	RIVER	RM
BALDUR	Village	376**	66 09 19	67 11 15	0.22	NaF 4%	Ha 100	1.13	WELL	MWSB
BENITO	Village	427	-	91.08 00	0.30	NaF 4%	Ha 100	0.92	RIVER	MWSB
BIRTLE	Town	802	89 05 04	87 11 07	0.26	NaF 4%	Ha 100	1.17	WELL	TOWN
BOISSEVAIN	Town	1,484	56 11 05	57 01 11	0.20	NaF 4%	Ha F	0.98	SI	TOWN
BRANDON	City	38,567	53 08 11	55 03 08	0.20	Na_2SiF_6	Hach	1.04	RIVER	CITY
CARMAN	Town	2,567	65 06 22	65 11 03	0.21	NaF 4%	Hach	1.07	RIVER	TOWN
CRANBERRY PORTAGE	UVD	817	83 03 19	83 12 14	<0.10	NaF 4%	Ha 100	1.10	LAKE	MWSB
DAUPHIN	Town	8,453	57 08 02	80 05 03	0.14	H_2SiF_6	Ha 100	1.09	SI	TOWN
DELORAINE	Town	1,045	67 07 28	68 09 24	0.16	NaF 4%	Ha 2	1.10	SI	MWSB
ERICKSON	Village	544	72 10 12	73 05 04	0.23	NaF 4%	Ha 100	1.11	WELL	MWSB
FLIN FLON	City	7,119	61.07.01	89.12.15	<0.10	H_2SiF_6	Ha 100	1.11	LAKE	CITY
GILBERT PLAINS	Village	714	-	89 02 22	0.19	NaF 4%	Ha 100	1.02	WELL	MWSB
GILLAM	LGD	1,893	74 08 14	87 01 03	<0.10	NaF 4%	Ha 100	1.18	RIVER	LGD
GIMLI	RM	600	-	69 04 18	0.43	NaF 4%	Ha 100	1.16	WELL	RM
GIMLI	Town	1,579	63.08.01	63.12.23	0.45	NaF 4%	Ha 100	1.03	WELL	TOWN
GLADSTONE	Town	928	71 04 19	76 09 23	0.22	NaF 4%	Ha 2000	1.05	RIVER	TOWN
HAMIOTA	Village	823	70 05 27	70 08 17	0.29	NaF 4%	Ha 100	1.05	WELL	MWSB
HARTNEY	Town	477	64 01 02	64 12 16	0.20	NaF 4%	Hach	1.04	WELL	TOWN
KILLARNEY	Town	2,163	60 10 12	60 10 25	0.19	NaF 4%	Hach	0.97	LAKE	TOWN
LAC DU BONNET	Village	1,076	89 05 04	85 09 00	<0.10	NaF 4%	Ha 100	1.20	WELL	MWSB
LETELLIER	Region	3,921	89 05 04	87 05 13	0.17	H_2SiF_6	Ha 3	1.08	RIVER	MWSB
MANITOU	Village	811	64 01 21	65 05 13	0.19	NaF 4%	Ha 100	1.14	SI	MWSB

NOTES:

The Red River Regional Water Treatment Plant in Letellier, Manitoba serves the following communities: Altona Rural Water Co-op, Dominion City, Gnadenfeld, Gnadenthal, Halbstadt - Marais Water Co-op, Hordean, Letellier, New Bercthal, Plum Coulee, Rosenfeld, Rosseau River Reserve and Sommerfeld.

The town of Altona receives a blend of water from the Regional Plant in Letellier and the water treatment plant in Neche, North Dakota, U.S.A.. Altona is a sampling location only.

The Village of MacGregor (Population 852 - 1991) began receiving water from the Austin-MacGregor Regional Treatment Plant in December/1989.

KEY:

1. Status
   - CFB - Canadian Forces Base
   - LGD - Local Government District
   - RM - Rural Municipality
   - UVD - Unincorporated Village District

2. Type of Chemical Feed
   - H_2SiF_6 - Fluorosilicic Acid
   - NaF - Sodium Fluoride
   - Na_2SiF_6 - Sodium Fluorosilicate (Dry)

3. Test Kit
   - Ha 2 - Hach DR-2
   - Ha 3 - Hach DR-3
   - Ha 100 - Hach DR-100
   - Ha 2000 - Hach DR-2000
   - Hach - Other Hach Model
   - HaF - Hach Filterophotometer
   - SIE - Specific Ion Electrode

4. Water Plant Owner
   - CFB - Canadian Forces Base
   - LGD - Local Government District
   - MWSB - Manitoba Water Services Board
   - RM - Rural Municipality

5. Water Source
   - SI - Surface Impoundment

MANITOBA HEALTH/DENTAL HEALTH
SUMMARY

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McCREARY	Village	554	69 08 28	69 11 18	0.24	NaF 3%	Ha 100	1.04	WELL	MWSB
MELITA	Town	1,134	89 05 04	87 02 14	0.18	NaF 4%	Ha 3	0.99	WELL	TOWN
MINNEDOSA	Town	2,526	60 01 25	86 04 00	0.28	NaF 4%	Ha F	1.05	WELL	TOWN
MORDEN	Town	5,273	68 09 09	69 11 17	0.32	NaF 4%	Ha 100	1.02	LAKE	TOWN
MORRIS	Town	1,616	89 05 04	89 02 27	0.21	NaF 4%	Ha	0.84	RIVER	TOWN
NEEPAWA	Town	3,258	63 06 10	63 07 10	0.24	Na_2SiF_6	Ha 2	1.13	LAKE	TOWN
PILOT MOUND	Village	747	68 10 25	70 12 21	0.21	NaF 3%	Ha 100	1.04	SI	MWSB
PINAWA	LGD	1,809	63 11 26	64 01 14	0.08	Na_2SiF_6	Ha 2	1.16	RIVER	LGD
PORTAGE LA PRAIRIE	City	13,186	57 12 20	58 01 13	0.20	Na_2SiF_6	SIE	1.20	RIVER	CITY
RESTON	Village	616**	67 09 13	68 11 26	0.13	NaF 4%	Ha	1.08	WELL	MWSB
RIVERS	Town	1,076	68 06 07	86 10 27	0.18	NaF 4%	Ha 2000	0.92	WELL	TOWN
ROBLIN	Town	1,838	69 06 07	86 10 27	0.26	NaF 4%	Hach	1.15	WELL	TOWN
ROSENORT	UVD	-	-	92 03 00	0.29	NaF 4%	Ha	0.64	RIVER	RM
ROSSBURN	Village	609	89 05 04	77 12 05	0.10	NaF 4%	Ha	1.13	WELL	MWSB
RUSSELL	Town	1,613	65 09 10	67 03 01	0.21	NaF 4%	Ha 2	1.07	WELL	MWSB
ST. JEAN	Village	571**	89 05 04	88.02.01	0.22	NaF 4%	Ha 100	1.11	RIVER	MWSB
STE. ROSE	Village	1,008	69 11 25	87 10 24	0.12	NaF 4%	Ha 3	0.98	WELL	MWSB
SANFORD	Region	1,657**	-	89 11 21	0.10	H_2SiF_6	Ha 100	1.07	WELL	RM
SANDY BAY	Reserve	1,849	N/A	83 00 00	0.20	NaF 4%	Ha 100	0.91	WELL	RSVE
SHILO	CFB	3,200**	N/A	69 01 14	0.12	NaF 4%	T	1.09	WELL	CFB
SHOAL LAKE	Village	784	68 08 26	87 03 28	0.27	NaF 4%	Ha 3	0.93	WELL	VILL
SNOW LAKE	Town	1,598	-	91 05 00	0.10	H_2SiF_6	Ha 100	0.98	LAKE	TOWN
SOURIS	Town	1,662	62 07 11	63 11 05	0.19	NaF 4%	Ha 2000	0.96	RIVER	MWSB
STEINBACH	Town	8,213	59 11 04	60 05 23	0.39	H_2SiF_6	Ha 2000	0.97	WELL	TOWN
SWAN RIVER	Town	3,917	80 10 07	82 08 08	0.18	H_2SiF_6	Hach	1.16	WELL	TOWN
THE PAS	Town	6,166	64 07 20	64 07 23	0.15	Na_2SiF_6	Ha 100	1.10	RIVER	TOWN
TREHERNE	Village	661	72 11 10	73 06 11	0.32	NaF 4%	Ha 100	1.12	WELL	VILL
VIRDEN	Town	2,894	71 01 11	71 04 08	0.44	NaF 4%	Ha 100	1.16	WELL	TOWN
WABOWDEN	Village	700	-	89.06.30	<0.10	NaF 4%	Ha 100	0.80	LAKE	UVD
WINKLER	Town	6,397	64 01 21	64 06 24	0.26	NaF 3%	Ha 2000	1.09	WELL	MWSB
WINNIPEG	City	616,790	56 07 20	56 12 28	0.10	H_2SiF_6	SIE	0.84	LAKE	CITY
WINNIPEGOSIS	Village	771	89 05 04	88 08 10	0.15	NaF 4%	Ha 100	1.07	WELL	MWSB
*OTHER		1,148**								

NOTES:
The Regional Plant in Sanford also serves the communities of Domain, LaSalle, Oakbluff and Starbuck.

*OTHER - The water treatment plant in Neche, North Dakota serves the following communities: Altona, Blumenort, Gretna, Kronstall, Neuhorst, and Rosetown.

KEY:

1. Status
   - CFB - Canadian Forces Base
   - LGD - Local Government District
   - RM - Rural Municipality
   - UVD - Unincorporated Village District

2. Type of Chemical Feed
   - H_2SiF_6 - Fluorosilicic Acid
   - NaF - Sodium Fluoride
   - Na_2SiF_6 - Sodium Fluorosilicate (Dry)

3. Test Kit
   - Ha 2 - Hach DR-2
   - Ha 3 - Hach DR-3
   - Ha 100 - Hach DR-100
   - Ha 2000 - Hach DR-2000
   - Hach - Other Hach Model
   - HaF - Hach Filterophotometer
   - SIE - Specific Ion Electrode

4. Water Plant Owner
   - CFB - Canadian Forces Base
   - LGD - Local Government District
   - MWSB - Manitoba Water Services Board
   - RM - Rural Municipality

5. Water Source
   - SI - Surface Impoundment

II. FLUORIDATION GRANT

Each fiscal year, approximately $12,000.00 is available through Dental Health/Manitoba Health. The grant is a one time award to communities initiating a fluoridation system. An average of 3 communities per year are eligible for this grant.

A. OVERVIEW

1) OBJECTIVE: To have all communal water systems in the Province fluoridated.

2) ELIGIBILITY: Any community with a population of 800 or more that currently does not have an optimal fluoride level in the water supply. Communities with population less than 800 will be considered.

3) DESCRIPTION: If a community is interested in this grant, contact can be made with the Fluoridation Officer, Manitoba Health/Dental Health. The officer will provide information on the grant program, make formal contact with the community and assist in the design, installation and operation of the equipment. Once the system is operational, the Fluoridation Officer will review and authorize payment to the community for the initial purchase and installation of the equipment. Assistance is provided with ongoing monitoring of the fluoride levels in the water supply.

4) FUNDING: The grant is based on actual initial costs of purchase and installation of equipment as submitted by communities.

5) MINISTERIAL APPROVAL: Approval is issued by the Minister of Health to communities operating fluoridation systems in accordance with the regulations under the Manitoba Public Health Act.

B. RECIPIENTS

In 1991/92 the communities listed below began optimally fluoridating their water supply and participated in the Community Water Fluoridation Monitoring Program. All applied for and were the recipients of fluoridation grant monies:

1) Town of Snow Lake

The Town of Snow Lake installed an acid feed system utilizing fluorosilic acid (H_2SiF_6) as the chemical feed. The system was operational in early April 1991.

2) Village of Benito

The Village of Benito installed an upflow saturator system utilizing sodium fluoride (NaF) as the chemical feed. The water treatment facility is owned by the Manitoba Water Services Board. The system was operational in mid-August 1991.

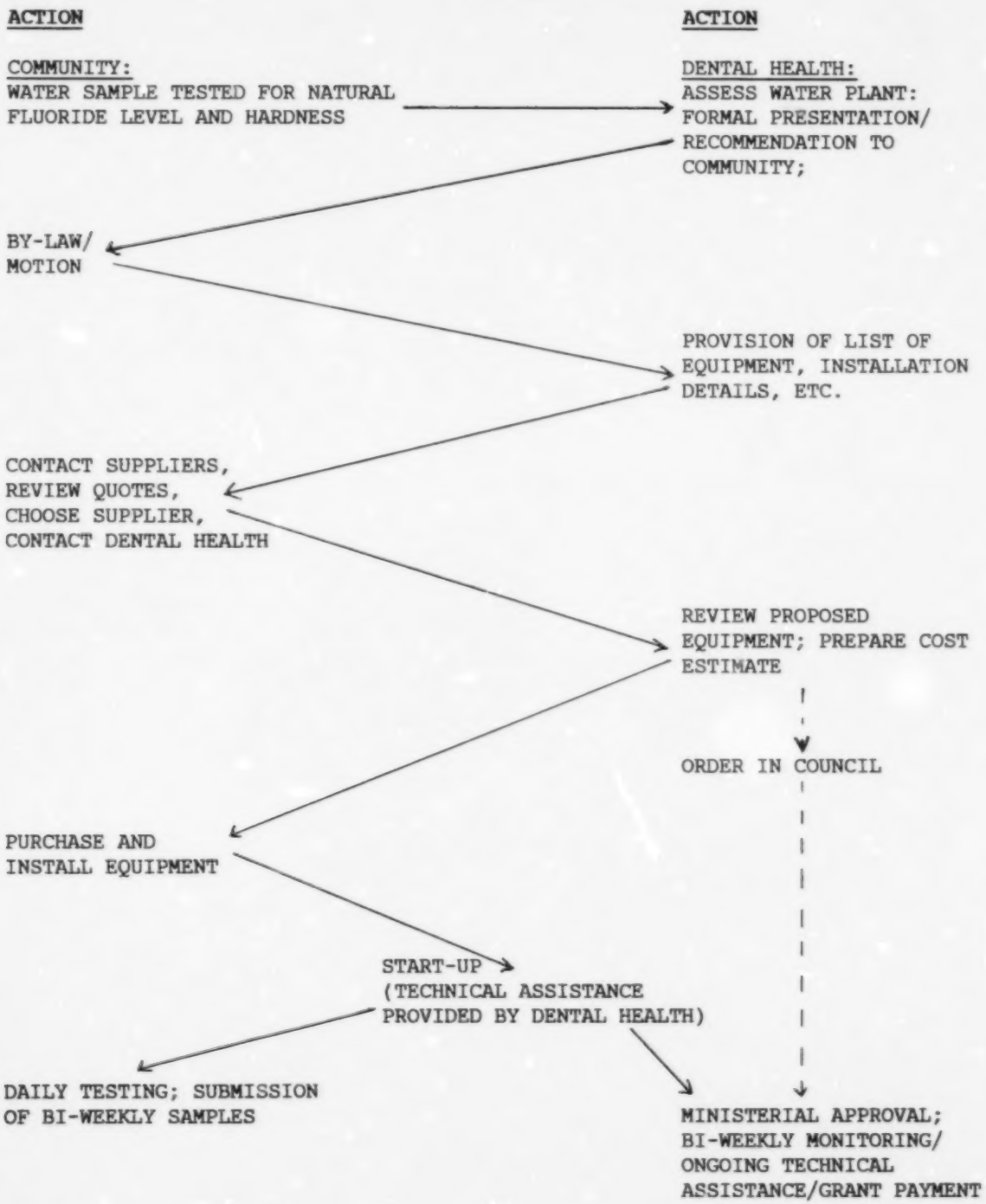
3) Unincorporated Village District of Rosenort (R.M. of Morris)

The R.M. of Morris installed an upflow saturator system in the water treatment facility located in the U.V.D. of Rosenort. The chemical feed solution is sodium fluoride (NaF). The system was operational in mid-March 1992.

MANITOBA HEALTH/DENTAL HEALTH FIGURE I

FLUORIDATION GRANT

PROCESS


ACTION
ACTION
COMMUNITY:
WATER SAMPLE TESTED FOR NATURAL FLUORIDE LEVEL AND HARDNESS
DENTAL HEALTH:
ASSESS WATER PLANT: FORMAL PRESENTATION/ RECOMMENDATION TO COMMUNITY;
BY-LAW/ MOTION
PROVISION OF LIST OF EQUIPMENT, INSTALLATION DETAILS, ETC.
CONTACT SUPPLIERS, REVIEW QUOTES, CHOOSE SUPPLIER, CONTACT DENTAL HEALTH
REVIEW PROPOSED EQUIPMENT; PREPARE COST ESTIMATE
ORDER IN COUNCIL
PURCHASE AND INSTALL EQUIPMENT
START-UP (TECHNICAL ASSISTANCE PROVIDED BY DENTAL HEALTH)
DAILY TESTING; SUBMISSION OF BI-WEEKLY SAMPLES
MINISTERIAL APPROVAL; BI-WEEKLY MONITORING/ ONGOING TECHNICAL ASSISTANCE/GRANT PAYMENT

NOTE: In communities where the Manitoba Water Services Board (MWSB) operates the water treatment plant, the MWSB and Dental Health work with the community to install the fluoridation equipment.

III. EQUIPMENT

Fluoridation systems are periodically monitored and reassessed for efficiency. Efforts are made to upgrade older equipment to more efficient systems.

A. OVERVIEW

Water treatment plants are visited on a periodic basis for the purpose of encouraging preventive maintenance of the fluoridation systems.

Ongoing assistance is provided to ensure that adequate maintenance and safety practices are being followed. Testing procedures are also reviewed to ensure accurate monitoring of fluoride levels.

In addition, technical assistance is available through the Chief Public Health Engineer, Manitoba Health on an as required basis.

B. FLUORIDATION SYSTEMS

Currently in Manitoba, there are four types of fluoridation systems in operation. They are as follows:

a) Acid Feed

This system utilizes fluorosilicic acid (H_2SiF_6) as the chemical feed. The system is generally recommended for larger treatment facilities. As of the end of the 1991/92 year, there were 8 acid feed systems in operation in Manitoba.

In July 1991 the Town of Steinbach upgraded it's system from a batch mix to an acid feed system.

b) Batch Mix

This system utilizes sodium fluoride (NaF) as the chemical feed. This system is labour intensive and communities utilizing this system are encouraged to upgrade to either an acid feed or an upflow saturator system. As of the end of the 1991/92 year, there were 4 batch mix systems still in operation in Manitoba. Efforts are under way to convert remaining systems to upflow saturators.

c) Dry Feed

This system utilizes sodium fluorosilicate (Na2SiF6) as the chemical feed. There are 5 systems currently in operation. These systems were designed and installed in the 1950's and 1960's for larger treatment facilities. All remaining are fully functional with few operating problems.

d) Upflow Saturator

This system is generally the system of choice for smaller treatment facilities. It utilizes sodium fluoride (NaF) in a 4% solution as the chemical feed. There are currenly 38 systems in operation in Manitoba.

In 1991/92, the communities of Deloraine, Lac du Bonnet, Reston, Rossburn, and Russell converted from batch mix to upflow saturator systems.

C. OPERATING PROBLEMS

Occasionally, temporary operating problems occur and are usually related to one of the following:

a) obsolete or malfunctioning fluoride feed equipment
b) obsolete or defective testing equipment
c) incorrect testing procedures
d) equipment breakdown
e) improper maintenance
f) change over to a new system

Occassionally, fluoridation problems are related to water plant problems which are rectified when the plants problems are corrected.

NOTE: With this report the names used to identify chemicals used in fluoridation systems have been changed to be consistent with recommendations of the World Health Organization. The chemical designations remain unchanged.

Chemical	Renamed
Sodium Fluoride (NaF)	No change
Hydrofluosilicic Acid (H2SiF6)	Fluorosilicic Acid
Sodium Silicofluoride (Na2SiF6)	Sodium Fluorosilicate

IV. MONITORING PROGRAM

A. OVERVIEW

The purpose of this program is to ensure that the recommended level for fluoride concentration is maintained in Manitoba's drinking water. All fifty-six (56) water treatment plants participated.

1) Operating Parameters

Dental Health identifies an operating range and an optimum level for fluoride concentration in drinking water. The optimum is 1 part per million (p.p.m.) or 1 milligram per litre (mg/l). The operating range for 1991/92 was set at 0.80 p.p.m. as a minimum with 1.30 p.p.m. as a maximum.

Water treatment plant operators are encouraged to maintain fluoride concentrations within the specified range.

Dental Health provides a schedule for biweekly monitoring periods. Normally a sampling year consists of 26 periods. In 1991/92 the reporting system was converted from a calendar year to a fiscal year necessitating a change to a 33 period sampling year. In subsequent years the reporting period will revert to 26 periods.

2) Supplies

Dental Health provides Fluoridation Control Record forms to the plants, to be submitted with the samples.

Dental Health also provides sampling bottles, fluoride standard solution, spadns (reagent) and shipping containers to the plants, through the W.M. Ward Technical Services lab. All are necessary for daily testing and bi-weekly sample submission.

3) Sample Submission

Samples are collected on a daily basis, tested on-site and results are recorded by the water treatment plant operator. A 14 day composite sample (approximately one litre) is submitted bi-weekly by the community for analysis. A record of chemical feed data (Fluoridation Control Record) is submitted with the sample.

4) Analysis

The W.M. Ward Techical Services Laboratory, located in Winnipeg, receives the samples and conducts the analysis. The results are reported to the individual water treatment plant operators and to Dental Health.

5) Monitoring

Dental Health monitors the levels, makes recommendations, and provides technical assistance accordingly. Periodic on-site visits to the water treatment plants are made to monitor testing and sampling procedures.

6) Reporting

Communities receive a mid year and an annual report of their plants operating record. On a periodic and/or on an as required basis, reports are provided during the operating year.

B. RESULTS

In 1991/92, out of a possible 1,795 samples, 1,767 bi-weekly samples were received for a submission rate of 98%.

Of the total submitted 1,555 or 88% were within the recommended range for fluoride concentration.

The number of samples found to be above the range was 90, representing 5% of the total.

There were 115 samples found to be below the range representing 7% of all samples submitted.

BI-WEEKLY SAMPLING RESULTS - 1991/92 - SUMMARY TABLE II

TOWN	NUMBER OF SAMPLES WITHIN LIMITS	NUMBER OF SAMPLES ABOVE LIMITS	NUMBER OF SAMPLES BELOW LIMITS	NUMBER OF SAMPLES SUBMITTED	NUMBER OF SAMPLES POSSIBLE
ALTONA	33	0	0	33	33
AUSTIN	31	2	0	33	33
BALDUR	31	2	0	33	33
BENITO	16	0	1	17	17
BIRTLE	8	10	15	33	33
BOISSEVAIN	25	1	6	32	33
BRANDON	32	0	0	32	33
CARMAN	33	0	0	33	33
C.F.B. SHILO	28	4	1	33	33
CRANBERRY PORTAGE	30	2	1	33	33
DAUPHIN	32	1	0	33	33
DELORAINE	27	5	1	33	33
ERICKSON	33	0	0	33	33
FLIN FLON	28	4	1	33	33
GILBERT PLAINS	32	0	1	33	33
GILLAM	19	5	0	24	33
GIMLI IND. PARK	33	0	0	33	33
GIMLI (TOWN)	32	1	0	33	33
GLADSTONE	33	0	0	33	33
HAMIOTA	33	0	0	33	33
HARTNEY	33	0	0	33	33
KILLARNEY	22	3	7	32	33
LAC DU BONNET	28	5	0	33	33
LETELLIER	33	0	0	33	33
MANITOU	31	2	0	33	33
MELITA	33	0	0	33	33
MINNEDOSA	23	4	5	32	33
MORDEN	33	0	0	33	33
MORRIS	22	0	11	33	33
McCREARY	33	0	0	33	33
NEEPAWA	32	1	0	33	33
PILOT MOUND	33	0	0	33	33
PINAWA	33	0	0	33	33
PORTAGE LA PRAIRIE	26	7	0	33	33
RESTON	31	2	0	33	33
RIVERS	10	4	16	30	33
ROBLIN	29	3	1	33	33
ROSENORT	0	0	2	2	2
ROSSBURN	26	4	3	33	33
RUSSELL	33	0	0	33	33
ST. JEAN	29	3	1	33	33
STE. ROSE DU LAC	29	0	4	33	33
SANDY BAY	17	1	8	26	33
SANFORD	33	0	0	33	33
SHOAL LAKE	30	0	3	33	33
SNOW LAKE	25	0	0	25	27
SOURIS	32	0	1	33	33
STEINBACH	29	0	4	33	33
SWAN RIVER	29	3	0	32	33
THE PAS	29	3	1	33	33
TREHERNE	31	1	1	33	33
VIRDEN	28	5	0	33	33
WABOWDEN	16	1	14	31	33
WINKLER	33	0	0	33	33
WINNIPEG	27	0	6	33	33
WINNIPEGOSIS	32	1	0	33	33
TOTAL	1562	90	115	1767	1795

C. CERTIFICATE OF COMMENDATION

Manitoba Health/Dental Health annually presents Certificates of Commendation to recognize water treatment plant operators that have maintained a high standard of operating efficiency for a fluoridation system.

In 1991/92, two categories of certificates were instituted to recognize special contributors to the dental health of Manitobans. The certificate is signed by both the Minister of Health and the Executive Director of Dental Health.

To be eligible for a Certificate of Commendation, a plant must be participating for 50% of the sampling year. For the 1991/92 sampling year this represented 17 periods.

There were 54 plants eligible for the certificates in 1991/92. The U.V.D. of Rosenort was not eligible because it was only participating for 2 periods. The Altona plant is not eligible for the certificate program because it is a sampling location only.

1) PERFECT OPERATING RECORD

The selection criteria are:

A) 100% of bi-weekly samples must be submitted for the sampling year

and

B) 100% of submitted samples must be within the recommended operating range for fluoride concentration

In 1991/92 certificates were presented to 15 water plant supervisors/operators. This represents 28% of the total number of eligible community fluoridation systems.

2) HIGH STANDARD OPERATING RECORD

The selection criteria are:

A) 85% or 28 out of 33 bi-weekly samples must be submitted for the sampling year,

and

B) 90% of submitted samples must be within the recommended operating range for fluoride concentration.

In 1991/92 certificates were presented to 17 water plant supervisors. This represents 31% of the total number of eligible community fluoridation systems.

NOTE: For the 1991/92 year only, the sampling year consisted of 33 bi-weekly sampling periods. The change was required to convert the reporting system to a fiscal year. For 1992/93, the awards will again be based on a sampling year of 26 bi-weekly periods.

CERTIFICATE OF COMMENDATION FIGURE II

1991/92 RECIPIENTS

1) Perfect Operating Record

Recipient	Plant Location	Operating Authority
Mr. Dennis Bell & Staff	Carman	Town of Carman
Mr. Ken Podruski & Staff	Erickson	Manitoba Water Services Board
Mr. Richard Bezdietny & Staff	Gimli Industrial Park	R.M. of Gimli
Mr. Bob Richardson	Gladstone	Town of Gladstone
Mr. Les Kirk & Staff	Hamiota	Manitoba Water Services Board
Mr. Mike Bobyk & Staff	Hartney	Town of Hartney
Mr. Ivan Harper & Staff	McCreary	Manitoba Water Services Board
Mr. Elmer Pederson & Staff	Melita	Town of Melita
Mr. Les Wieler & Staff	Morden	Town of Morden
Mr. Gary Odlum & Staff	Pilot Mound	Manitoba Water Services Board
Mr. Ron McDowall & Staff	Pinawa	L.G.D. of Pinawa
Mr. Jack Cronk & Staff	Red River Regional Water Treatment Plant (Letellier)	Manitoba Water Services Board
Mr. Harold Schrader & Staff	Russell	Manitoba Water Services Board
Mr. Keith Murphy & Staff	Sanford	R.M. of MacDonald
Mr. Lou Loewen & Staff	Winkler	Town of Winkler

2) High Standard Operating Record

Recipient	Plant Location	Operating Authority
Mr. Don Hotel & Staff	Austin	R.M. of North Norfolk
Mr. Raymond Lussier	Baldur	Manitoba Water Services Board
Mr. Rick Kinaschuk & Staff	Benito	Manitoba Water Services Board
Mr. Herb Gerling/Mr. George Jago	Brandon	City of Brandon
Mr. Dixie Nagy & Staff	Cranberry Portage	Manitoba Water Services Board
Mr. Eugene Mayuk & Staff	Dauphin	Town of Dauphin
Mr. Lloyd Beckley & Staff	Gilbert Plains	Manitoba Water Services Board
Mr. Baldur Gudbjartson & Staff	Gimli	Town of Gimli
Mr. Percy Lea & Staff	Manitou	Manitoba Water Services Board
Mr. George Squires & Staff	Neepawa	Town of Neepawa
Mr. Ken Moore	Reston	Manitoba Water Services Board
Mr. Johnny Michasiw	Shoal Lake	Village of Shoal Lake
Mr. Ernie Sorgenson & Staff	Snow Lake	Town of Snow Lake
Mr. Bill Zander & Staff	Souris	Town of Souris
Mr. Dick Sopotyk & Staff	Swan River	Town of Swan River
Mr. Don Lounsbury	Treherne	Village of Treherne
Mr. Ron Pascal & Staff	Winnipegosis	Manitoba Water Services Board

V. MANITOBA WATER SERVICES BOARD

The Manitoba Water Services Board (M.W.S.B.) owns and operates treatment facilities across Manitoba and provides water to communities.

In communities currently fluoridating the M.W.S.B. works cooperatively with Dental Health to ensure that the requirements of the fluoridation monitoring system are met.

In communities wishing to fluoridate, the M.W.S.B. works in conjunction with Dental Health to assess the water treatment facility, design the fluoridation system and coordinate installation and start-up.

M.W.S.B. plant operators are trained by Dental Health staff in proper testing operating and maintenance procedures for their specific fluoridation systems.

The M.W.S.B. is currently in the process of converting existing batch mix systems to up-flow saturator on a plant by plant basis.

TABLE III

MANITOBA WATER SERVICES BOARD
SUMMARY
FLUORIDATING FACILITIES
PERFORMANCE - 1986 THROUGH 1991/92

PERCENTAGE OF SAMPLES CONTAINING FLUORIDE WITHIN THE RECOMMENDED RANGE

PLANT	YEAR					
	1986	1987	1988	1989	1990	1991/92
Altona	85	58*	92	81	100	100
Austin	-	-	-	96	92	92
Baldur	100	80	92	100	100	92
Benito	-	-	-	-	-	94
Cranberry Portage	80	100	89	100	90	91
Deloraine	85	89	52	73	100	82
Erickson	83	77	85	85	68	100
Gilbert Plains				100	96	97
Hamiota	83	62	80	69	96	100
Lac du Bonnet	91	96	81	100	92	85
Letellier	-	100	100	100	100	100
Manitou	100	100	85	100	100	94
McCreary	100	100	100	100	100	100
Pilot Mound	85	96	100	100	100	100
Reston	100	100	92	100	100	94
Rossburn	67	72	85	50	100	79
Russell	100	100	100	100	100	100
St. Jean			77	92	100	88
Winkler	100	92	100	100	100	100
Winnipegosis			100	100	96	97
OVERALL AVERAGE	90%	88%	89%	92%	96%	94%

*Samples from January to May represents a blend of water including non-fluoridated water from Letellier. Letellier began fluoridating in June, 1987.

NOTE: As of this report the M.W.S.B. is no longer responsible for the plants in: Austin, Gilbert Plains, Lac du Bonnet, and Winkler.

VI. SUPPORT SERVICES

Manitoba Health/Dental Health wishes to acknowledge the support received from various groups and government departments which provided assistance with the performance of the Community Water Fluoridation Program:

i. Mayors, Community Councils, Waterworks Chairmen, and especially water treatment plant operators and supervisors in all locations with community water fluoridation systems in operation.

ii. Mr. George Balacko, Environmental Health/Manitoba Health for engineering consultation and assistance with fluoridation system operating problems.

iii. The Manitoba Water Services Board for the cooperative efforts made to ensure Dental Health standards were observed in all fluoridating locations.

iv. The W.M. Ward Technical Services Laboratory for the provision of fluoride level analyses and the distributing of reagents, sample bottles and fluoride results to participating communities, as paid for by Manitoba Health.

All of the above individuals and agencies have been instrumental in the provision of this important preventive dental health measure to the citizens of Manitoba.

VII

FLUORIDE

CONTROL

DATA

1991/92

FLUORIDE CONTROL DATA
1991/92 SUMMARY

TABLE IV

2 WEEKS STARTING:	DEC 29	JAN 12	JAN 26	FEB 09	FEB 23	MAR 09	MAR 23	APR 06	APR 20	MAY 04	MAY 18	JUN 01	JUN 15	JUN 29	JUL 13	JUL 27	AUG 10	AUG 24	SEP 07	SEP 21	OCT 05	OCT 19	NOV 02	NOV 16	NOV 30	DEC 14	DEC 28	JAN 11	JAN 25	FEB 08	FEB 22	MAR 07	MAR 21
PERIOD:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
ALTONA	1.15	1.06	1.05	1.08	1.00	1.27	1.15	1.05	1.09	1.00	1.13	1.15	1.15	1.25	1.23	1.20	1.15	1.16	1.13	1.14	1.09	1.10	1.15	1.14	1.07	1.10	1.15	1.15	1.16	1.16	1.15	1.01	1.14
AUSTIN	1.35	1.45	1.21	1.12	1.13	1.14	1.15	1.15	1.10	1.22	1.08	1.10	1.10	1.10	1.00	0.95	1.08	0.99	1.03	1.07	1.09	1.15	1.14	1.14	1.17	1.14	1.12	1.07	1.19	1.06	1.09	1.19	1.00
BALDUR	1.13	1.12	1.29	1.34	1.20	1.09	1.22	1.19	1.22	1.19	1.11	1.10	1.11	1.20	1.23	1.37	1.26	1.28	1.16	1.18	0.92	1.20	1.15	1.00	1.05	1.00	1.12	1.00	1.05	0.91	0.91	1.00	1.00
BENITO																	0.67	0.95	0.95	0.95	0.96	0.97	1.00	0.93	0.91	0.92	1.11	0.89	0.92	0.86	0.87	0.93	0.88
BIRTLE	0.75	0.67	0.52	1.34	1.60	1.05	1.29	1.00	0.60	0.62	0.51	1.00	1.74	1.00	0.63	0.83	0.64	4.14	1.37	0.54	0.92	2.70	2.00	1.59	2.28	1.00	2.46	0.66	0.58	0.63	0.63	0.65	0.63
BOISSEVAIN	0.77	0.91	1.09	1.05	0.84	1.22	1.29	1.00	1.11	1.03	1.09	1.28	1.31	1.14	0.80	0.92	1.00	1.00	1.10	1.10	0.79	0.72	0.70	0.74	0.79	0.89		0.87	0.93	0.88	0.95	0.99	1.00
BRANDON	1.08	1.18	1.11	1.12	0.98	0.98	1.12	1.10	1.06	1.10	1.08	1.10	1.03	1.09	0.94	1.04	1.08	1.05	1.00	1.03	1.07	1.05	1.05	1.03	0.94	1.00		0.87	1.05	0.95	0.95	1.01	1.00
CARMAN	0.95	1.17	1.16	1.16	1.10	1.19	0.84	0.90	1.17	0.95	1.11	1.08	1.10	1.12	1.07	1.00	1.00	0.99	1.05	1.12	1.25	1.10	1.10	1.00	1.07	1.19	1.02	1.14	1.20	1.20	1.07	0.88	0.95
C.F.B. SHILO	0.95	1.09	1.12	1.12	1.17	1.25	1.18	1.15	1.18	1.03	1.03	1.00	0.83	0.53	0.87	1.10	1.24	1.11	1.00	1.03	0.93	1.25	1.40	1.17	1.22	1.29	1.40	1.40	1.31	0.91	0.90	0.92	0.80
CRANBERRY PORTAGE	1.08	1.00	1.25	1.18	1.04	1.09	1.07	1.25	1.08	1.06	1.12	0.96	1.30	1.30	1.32	1.15	0.86	1.35	1.13	1.00	1.15	1.20	1.00	0.89	1.18	1.10	0.83	0.69	1.20	1.07	1.00	1.29	1.18
DAUPHIN	1.05	0.95	0.95	0.82	1.17	0.89	1.07	1.09	1.03	1.75	1.24	1.18	1.11	1.18	1.15	1.24	1.17	1.28	1.25	1.09	0.95	1.05	1.05	1.00	0.86	1.10	1.15	1.08	1.00	1.00	1.07	1.06	1.05
DELORAINE	0.97	1.27	1.20	1.00	1.12	1.16	1.40	1.33	1.05	1.00	1.03	1.00	1.19	1.08	1.59	1.75	1.83	1.13	0.91	0.92	1.07	0.97	0.85	1.00	1.00	1.05	1.05	1.05	0.82	0.80	0.77	0.87	1.05
ERICKSON	1.12	1.12	1.06	1.21	1.15	1.08	1.21	1.19	1.15	1.19	1.08	1.20	1.12	1.15	1.23	1.06	1.10	1.03	1.16	1.16	1.17	1.10	1.07	1.05	1.07	1.10	1.05	1.07	0.99	1.10	1.05	0.96	0.93
FLIN FLON	1.20	1.12	1.12	1.08	1.15	1.04	1.04	1.00	0.98	1.00	1.12	1.24	1.25	1.32	1.28	1.50	1.50	1.45	0.73	1.18	1.13	1.10	1.04	1.14	1.05	1.05	0.95	0.95	1.12	0.99	1.00	0.96	0.93
GILBERT PLAINS	1.00	1.05	1.00	1.10	1.17	1.07	1.15	1.15	1.22	1.15	1.24	1.10	1.08	1.10	0.99	0.98	1.10	1.07	1.04	1.00	1.00	0.95	0.67	1.00	0.91	1.00	0.97	0.95	0.95	0.95	0.90	0.88	0.93
GILLAM	1.00	0.88	1.00			1.04	1.30	1.40	1.35	1.34	1.25			1.25	1.37	1.08			1.10	1.27	1.41	1.25	1.25	1.14	1.16			1.11	1.19		1.12	1.09	1.05
GIMLI (IND. PARK)	1.15	1.16	1.00	1.13	1.12	1.16	1.20	1.19	1.15	1.17	1.19	1.18	1.19	1.18	1.20	1.15	1.19	1.23	1.23	1.16	1.15	1.20	1.18	1.17	1.21	1.19	1.19	1.23	1.18	1.07	1.07	1.10	1.09
GIMLI (TOWN)	0.80	1.15	1.12	1.05	1.04	0.93	0.95	1.05	1.00	0.91	0.88	0.93	0.87	0.81	1.03	1.02	0.92	1.28	1.03	1.14	1.04	1.00	1.10	0.88	0.95	1.05	1.85	1.15	1.07	0.95	0.90	0.94	1.13
GLADSTONE	1.15	1.17	1.11	1.22	1.13	1.12	1.07	1.15	1.18	1.16	1.12	1.14	1.05	0.95	1.00	1.02	1.04	1.07	1.07	1.00	0.97	1.00	1.04	1.00	1.07	1.05	0.95	1.05	0.96	0.99	0.99	0.92	0.90
HAMIOTA	1.12	1.15	1.11	1.09	1.12	1.16	1.18	1.05	1.12	1.30	1.25	1.15	1.03	0.88	1.00	1.00	0.92	1.06	1.00	1.00	1.00	0.95	0.92	0.92	0.87	0.85	1.05	1.08	0.96	1.07	1.07	1.06	1.05
HARTNEY	0.87	0.95	1.00	1.05	0.94	0.90	1.20	1.00	0.91	0.91	1.20	1.25	1.13	1.07	1.09	1.00	1.06	1.03	1.20	1.07	0.97	0.92	1.00	1.03	1.00	1.05	1.09	1.11	1.10	1.06	1.09	0.94	1.00
KILLARNEY		1.06	1.19	1.16	1.17	0.78	1.12	1.03	0.90	0.94	1.00	0.80	0.65	1.17	1.00	0.68	1.04	0.92	0.80	0.87	1.90	0.85	1.00	1.08	0.65	0.64	1.34	1.32	0.80	0.63	0.60	0.99	1.00
LAC DU BONNET	1.25	1.25	1.35	1.18	1.22	1.14	1.26	1.10	1.32	1.22	1.35	1.40	1.23	1.25	1.17	1.00	1.06	1.19	1.12	1.28	1.27	1.35	1.15	1.17	1.14	1.14	1.09	1.07	1.19	1.20	1.21	1.20	1.18
LETELLIER	1.05	1.05	1.07	1.05	0.88	0.95	0.92	0.92	0.94	0.95	1.11	1.05	1.23	1.20	1.15	1.24	1.15	1.14	1.13	1.23	1.15	1.05	1.05	1.08	1.05	1.10	1.06	1.07	1.12	1.10	1.17	1.09	1.05
MANITOU	1.12	1.12	1.11	1.17	1.17	1.34	1.12	1.10	1.08	1.16	1.15	1.15	1.19	1.32	1.11	1.10	1.20	1.08	1.10	1.15	1.09	1.05	1.10	1.07	1.14	1.05	1.09	1.18	1.26	1.20	1.12	1.25	1.05
MELITA	1.20	1.12	1.12	1.00	1.15	1.00	1.07	1.03	1.05	1.13	1.06	1.05	1.00	0.88	0.80	0.91	0.91	0.89	0.84	0.86	0.92	0.92	1.04	0.92	0.94	0.96	1.12	1.14	1.04	0.89	0.87	0.93	0.95
MINNEDOSA		1.05	1.21	0.94	1.40	1.04	0.98	1.00	1.05	1.28	1.25	1.05	1.90	0.91	0.87	1.00	1.50	0.77	0.86	0.90	0.48	0.53	0.66	1.07	1.12	1.05	1.05	1.00	0.91	0.91	0.74	1.92	1.06
MORDEN	1.15	1.18	1.22	1.18	1.12	1.07	1.15	1.05	0.98	1.04	1.00	1.00	0.96	0.95	0.95	1.07	1.04	1.03	1.03	1.10	1.05	1.00	0.97	0.97	0.95	0.92	0.90	0.87	0.92	0.99	1.00	0.93	0.93
MORRIS	0.90	0.85	0.75	0.80	0.88	0.96	1.05	1.10	1.12	1.11	1.15	1.00	0.95	0.80	0.76	0.33	0.48	0.35	0.50	0.67	0.64	0.73	0.77	0.80	0.83	0.92	1.00	1.18	0.95	0.65	0.83	0.94	0.88
MCCREARY	1.05	1.05	1.03	1.00	1.00	1.04	1.04	0.96	0.91	0.91	1.00	0.97	1.00	1.05	0.99	1.04	1.10	1.09	1.05	1.07	1.13	1.10	1.05	1.00	1.00	1.10	1.00	1.02	1.20	1.10	1.12	0.96	1.04
NEEPAWA	1.13	1.22	1.15	1.17	1.10	1.00	1.07	0.96	1.00	1.13	1.20	1.20	1.25	1.18	1.28	1.19	1.26	1.22	1.12	1.30	1.33	1.30	1.07	1.15	1.09	1.05	1.09	0.92	1.11	0.95	0.90	1.00	1.04

NOTE: Benito began fluoridating in Period #17.

FLUORIDE CONTROL DATA
1991/92 SUMMARY

TABLE IV

2 WEEKS STARTING:	DEC 29	JAN 12	JAN 26	FEB 09	FEB 23	MAR 09	MAR 23	APR 06	APR 20	MAY 04	MAY 18	JUN 01	JUN 15	JUN 29	JUL 13	JUL 27	AUG 10	AUG 24	SEP 07	SEP 21	OCT 05	OCT 19	NOV 02	NOV 16	NOV 30	DEC 14	DEC 28	JAN 11	JAN 25	FEB 08	FEB 22	MAR 07	MAR 21
PERIOD:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
PILOT MOUND	1.05	1.00	0.94	0.98	0.92	0.96	0.92	1.00	1.00	1.00	1.05	1.00	1.03	1.10	1.00	1.05	1.05	1.08	1.00	1.12	1.17	1.00	1.10	1.11	1.00	1.05	1.17	1.07	1.19	1.10	1.07	1.14	1.05
PINAWA	1.15	1.27	1.20	1.12	1.18	1.14	1.29	1.18	1.27	1.29	1.15	1.15	1.12	1.25	1.12	1.10	1.15	1.09	1.12	1.24	1.17	0.93	1.20	1.14	1.07	1.10	1.00	1.24	1.11	1.06	1.02	0.93	1.05
PORTAGE LA PRAIRIE	1.32	1.20	1.15	1.27	1.25	1.17	1.20	1.14	1.10	1.13	1.12	1.15	1.23	1.17	1.28	1.36	1.34	1.43	1.30	1.36	1.44	1.40	1.23	1.07	1.18	1.24	1.19	1.12	1.06	0.91	1.07	1.01	0.92
RESTON	1.07	1.08	1.21	1.12	1.13	1.12	1.00	1.15	1.39	1.34	1.06	1.04	1.15	1.17	1.23	1.22	1.10	1.28	1.20	1.30	1.09	0.93	0.95	0.97	1.00	0.96	1.00	0.95	0.99	0.87	0.91	0.91	0.90
RIVERS	0.92	0.69	0.71	0.58	0.55	1.04	0.74	0.66	0.65	0.60	0.90	0.91	0.84	0.88	0.80	0.80			2.40	2.60	0.75	1.09	0.71	0.64	0.82	0.68	0.71		0.39	0.78	1.57	1.40	0.69
ROBLIN	1.07	1.15	1.28	1.12	1.07	1.16	1.12	1.20	1.15	0.92	1.16	1.15	1.23	1.20	1.23	0.71	1.20	1.16	1.13	1.35	1.00	1.15	1.00	1.20	1.22	1.35	1.39	1.28	1.12	1.27	1.07	1.10	1.19
ROSENORT																																0.51	0.76
ROSSBURN	1.17	1.22	1.11	1.20	1.15	1.04	1.20	1.10	1.17	1.11	1.03	1.04	1.05	1.22	1.23	1.27	1.24	1.19	0.91	1.12	1.00	1.30	1.28	1.24	1.47	1.00	0.85	0.72	0.68	0.67	1.32	1.52	1.45
RUSSELL	1.05	1.17	1.03	1.12	1.12	1.12	1.22	1.10	1.12	1.03	1.20	1.17	1.06	1.18	1.09	1.15	1.06	1.11	1.19	1.23	1.05	1.00	1.00	1.05	0.95	0.85	1.05	1.12	1.00	0.99	0.90	1.04	0.92
ST. JEAN	1.04	1.04	1.12	1.00	1.20	1.11	1.07	1.25	1.32	1.15	1.13	1.05	0.95	0.92	1.07	1.20	1.39	1.39	1.12	1.18	1.07	1.05	1.19	1.19	0.75	1.23	1.24	1.07	1.08	1.06	0.98	0.94	0.93
STE. ROSE DU LAC	1.15	0.46	0.83	1.00	0.38	1.25	1.29	1.28	1.26	1.30	1.10	0.96	1.06	1.17	1.03	1.00	1.12	1.14	0.87	0.75	0.90	0.84	0.85	0.99	1.11	0.86	0.88	0.88	0.95	0.88	0.71	0.93	1.25
SANDY BAY		0.53	0.58	0.55	0.56	0.59	0.71	0.72		1.09	0.95	1.04	0.90	1.00	0.90		0.84			1.00	1.13	1.30	1.50	0.98	0.98	0.89	0.70		0.99	1.05	1.04		1.05
SANFORD	1.25	1.17	1.20	1.07	1.17	1.08	1.15	1.14	1.09	1.05	1.12	1.25	1.16	1.14	1.10	1.17	1.11	1.07	1.25	1.15	1.07	0.95	0.92	0.97	0.90	0.92	1.00	1.00	0.95	0.95	0.93	0.94	0.90
SHOAL LAKE	0.95	0.96	1.15	1.10	1.07	1.07	1.07	1.00	1.00	0.95	0.90	0.95	0.90	0.91	0.90	0.91	0.84	0.86	0.88	0.95	0.88	0.85	0.91	1.00	1.00	0.75	0.73	0.75	0.82	0.99	0.90	0.85	0.97
SNOW LAKE							0.97		1.03	1.00	1.00	1.00	0.90	1.12	1.04	1.05	0.86	0.96	1.00	1.03	0.95	1.00	0.92	0.92	1.07	1.23	1.00	1.05	0.95	0.82	0.88		0.85
SOURIS	0.95	0.92	0.92	0.94	0.92	0.90	0.83	0.80	0.71	0.83	0.80	0.88	0.83	0.85	1.00	1.05	0.94	0.96	0.88	0.95	0.97	0.97	1.04	0.92	1.24	1.00	1.09	1.02	1.05	0.95	1.05	1.23	1.15
STEINBACH	0.72	0.85	0.86	0.97	1.05	0.94	0.87	0.85	0.95	0.90	0.90	0.91	0.71	0.94	0.94	0.74	0.75	1.00	1.00	1.10	1.09	1.10	1.00	1.03	1.05	0.98	0.97	1.12	1.12	1.20	1.12	1.14	1.04
SWAN RIVER	1.27	1.32	1.11	1.22	1.09	1.17	1.18	1.10	1.22	1.16	1.25	1.24	1.15	0.96	0.99	1.00	1.06	1.09	1.40	1.18	1.07	1.00	1.40	1.19	1.17	1.24	1.19	1.16	1.20	1.10	1.12	1.00	
THE PAS	1.10	1.43	1.16	1.09	1.20	1.06	1.35	1.19	1.18	1.16	1.15	1.15	1.00	1.22	1.07	1.34	1.10	1.16	1.12	1.03	1.07	0.60	1.05	1.00	1.07	1.13	1.09	0.95	0.95	1.02	1.02	1.09	1.05
TREHERNE	1.20	1.12	1.16	1.12	1.12	1.14	1.15	1.00	1.05	1.06	1.12	1.09	1.07	1.17	1.22	1.00	1.04	1.03	1.19	1.27	1.13	1.10	1.05	1.15	1.14	1.14	1.05	0.66	1.30	1.03	1.26	1.35	1.25
VIRDEN	1.31	1.55	1.00	1.25	1.05	1.07	1.24	1.23	1.18	1.12	1.20	1.65	1.13	0.96	1.00	0.98	1.06	1.04	0.80	1.00	1.09	1.05	1.90	1.08	0.92	0.81	1.28	1.18	1.19	1.25	1.21	1.34	1.17
WABOWDEN	0.95	0.85	0.61	1.22	1.05	1.10	1.18	0.90	1.25	1.16	1.06	1.20	1.13	0.65	1.55	1.00	0.45	0.33	0.60	0.85	0.35	0.19	0.80	1.25	0.68		0.55	0.36	0.49	0.28	0.43	0.23	
WINKLER	1.25	1.25	1.11	1.15	0.96	0.98	1.04	1.10	1.05	1.13	1.09	1.15	1.08	1.18	1.18	0.95	1.03	1.22	1.16	1.24	1.23	1.25	1.14	0.88	0.94	1.05	1.00	1.08	1.00	1.00	1.04	1.01	1.00
WINNIPEG	0.12	0.10	0.11	0.12	0.28	0.60	0.86	0.94	0.95	0.90	0.90	0.82	0.84	0.94	1.03	1.00	1.00	1.00	1.00	1.03	1.05	1.00	1.07	0.92	0.87	1.05	1.05	1.07	1.07	1.06	1.07	1.04	1.00
WINNIPEGOSIS	0.95	1.00	0.90	1.10	0.98	1.04	1.14	0.86	1.03	1.09	1.05	0.97	1.08	1.05	1.00	1.20	1.15	1.12	1.19	1.23	1.13	1.10	1.09	1.00	1.04	1.19	1.57	1.29	1.00	0.91	0.80	0.96	0.98

NOTE: Rosenort began fluoridating in Period #32.
Snow Lake began fluoridating in Period #7.

FLUORIDATION CONTROL DATA - KEY

All figures reported are recorded in parts per million (p.p.m.) or milligrams per litre (mg/l).

COMPOSITE (LAB) - Fluoride level analysis conducted by the W.M. Ward Technical Services Laboratory on the bi-weekly composite sample submitted by the water plant operator.

COMPOSITE (OPERATOR) - Fluoride level analysis conducted and reported by the water treatment plant operator on the bi-weekly sample before it is submitted to the W.M. Ward Technical Services Laboratory.

AVERAGE DAILY - Mathematical average of the daily fluoride tests conducted and reported by the water treatment plant operator.

CALCULATED FEED - The fluoride dosage added to the water supply, calculated from the amount of fluoride chemical added and the amount of water treated as reported by the water treatment plant operator.

NATURAL FLUORIDE - The amount of fluoride in the water before treatment.

THEORETICAL DOSAGE - Calculated Dosage plus Natural Content.

NOTE: If "NOT AVAIL" appears in any column, it indicates that data is not available due to one of the following reasons:

- sample not submitted
- sample broken in transit
- information not provided
- sample was contaminated

FLUORIDE CONTROL DATA - 1991/92

LOCATION - ALTONA
CHEMICAL - H2SiF6 25%
TEST KIT - N/A
NATURAL FLUORIDE 0.29

FLUORIDATOR -W&T A-745
OPERATOR - Dick Klassen
TELEPHONE - 324-6633
CALCULATION - N/A

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	1.15				
2.JAN 12-JAN 25	1.06				
3.JAN 26-FEB 08	1.05				
4.FEB 09-FEB 22	1.08				
5.FEB 23-MAR 08	1.00				
6.MAR 09-MAR 22	1.27				
7.MAR 23-APR 05	1.15				
8.APR 06-APR 19	1.05				
9.APR 20-MAY 03	1.09				
10.MAY 04-MAY 17	1.00				
11.MAY 18-MAY 31	1.13				
12.JUN 01-JUN 14	1.15				
13.JUN 15-JUN 28	1.15				
14.JUN 29-JUL 12	1.25				
15.JUL 13-JUL 26	1.23				
16.JUL 27-AUG 09	1.20				
17.AUG 10-AUG 23	1.15				
18.AUG 24-SEP 06	1.16				
19.SEP 07-SEP 20	1.13				
20.SEP 21-OCT 04	1.14				
21.OCT 05-OCT 18	1.09				
22.OCT 19-NOV 01	1.10				
23.NOV 02-NOV 15	1.15				
24.NOV 16-NOV 29	1.14				
25.NOV 30-DEC 13	1.07				
26.DEC 14-DEC 27	1.10				
27.DEC 28-JAN 10	1.15				
28.JAN 11-JAN 24	1.15				
29.JAN 25-FEB 07	1.16				
30.FEB 08-FEB 21	1.16				
31.FEB 22-MAR 06	1.15				
32.MAR 07-MAR 20	1.01				
33.MAR 21-APR 03	1.14				
AVERAGE TO DATE	1.13				
RANGE - LOW	1.00				
TO DATE - HIGH	1.27				
SAMPLES ABOVE LIMITS	0				
SAMPLES BELOW LIMITS	0				
% OUTSIDE LIMITS TO DATE	0.00%				
NUMBER OF SAMPLES TO DATE	33				

NOTE: Altona is a sampling location only. Fluoride is added in Letellier, MB and Neche, North Dakota, U.S.A. Water from both sources is blended for use in the Altona area.

FLUORIDE CONTROL DATA - 1991/92

LOCATION - AUSTIN
CHEMICAL - NaF 4%
TEST KIT - Hach DR-100
NATURAL FLUORIDE 0.19

FLUORIDATOR -LMI.A741
OPERATOR - Don Hotel
TELEPHONE - 637-2101
CALCULATION - 17600

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	1.35	1.20	1.14	NOT AVAIL	0.00
2.JAN 12-JAN 25	1.45	1.30	1.24	NOT AVAIL	0.00
3.JAN 26-FEB 08	1.21	1.25	0.96	NOT AVAIL	0.00
4.FEB 09-FEB 22	1.12	1.15	1.14	NOT AVAIL	0.00
5.FEB 23-MAR 08	1.13	1.10	1.05	NOT AVAIL	0.00
6.MAR 09-MAR 22	1.14	1.20	1.17	NOT AVAIL	0.00
7.MAR 23-APR 05	1.15	1.20	1.14	NOT AVAIL	0.00
8.APR 06-APR 19	1.15	1.20	1.13	NOT AVAIL	0.00
9.APR 20-MAY 03	1.10	1.10	1.09	NOT AVAIL	0.00
10.MAY 04-MAY 17	1.22	1.30	1.19	NOT AVAIL	0.00
11.MAY 18-MAY 31	1.08	1.20	1.14	NOT AVAIL	0.00
12.JUN 01-JUN 14	1.10	1.20	1.18	NOT AVAIL	0.00
13.JUN 15-JUN 28	1.10	1.15	1.10	NOT AVAIL	0.00
14.JUN 29-JUL 12	1.10	1.20	1.18	NOT AVAIL	0.00
15.JUL 13-JUL 26	1.00	1.10	1.11	NOT AVAIL	0.00
16.JUL 27-AUG 09	0.95	1.10	1.11	NOT AVAIL	0.00
17.AUG 10-AUG 23	1.08	1.20	1.17	NOT AVAIL	0.00
18.AUG 24-SEP 06	0.99	1.10	1.10	NOT AVAIL	0.00
19.SEP 07-SEP 20	1.03	1.10	1.13	NOT AVAIL	0.00
20.SEP 21-OCT 04	1.07	1.30	1.16	NOT AVAIL	0.00
21.OCT 05-OCT 18	1.09	1.10	1.14	NOT AVAIL	0.00
22.OCT 19-NOV 01	1.15	1.20	1.16	NOT AVAIL	0.00
23.NOV 02-NOV 15	1.14	1.20	1.10	NOT AVAIL	0.00
24.NOV 16-NOV 29	1.14	1.20	1.14	NOT AVAIL	0.00
25.NOV 30-DEC 13	1.17	1.20	1.13	NOT AVAIL	0.00
26.DEC 14-DEC 27	1.14	1.00	1.09	NOT AVAIL	0.00
27.DEC 28-JAN 10	1.12	1.00	1.15	NOT AVAIL	0.00
28.JAN 11-JAN 24	1.07	1.10	1.11	NOT AVAIL	0.00
29.JAN 25-FEB 07	1.19	1.20	1.18	NOT AVAIL	0.00
30.FEB 08-FEB 21	1.06	1.20	1.13	NOT AVAIL	0.00
31.FEB 22-MAR 06	1.09	1.10	1.11	NOT AVAIL	0.00
32.MAR 07-MAR 20	1.19	1.20	1.16	NOT AVAIL	0.00
33.MAR 21-APR 03	1.00	1.10	0.86	NOT AVAIL	0.00
AVERAGE TO DATE	1.12	1.17	1.12	ERR	ERR
RANGE - LOW	0.95	1.00	0.86	ERR	ERR
TO DATE - HIGH	1.45	1.30	1.24	ERR	ERR

SAMPLES ABOVE LIMITS	2
SAMPLES BELOW LIMITS	0
% OUTSIDE LIMITS TO DATE	6.06%
NUMBER OF SAMPLES TO DATE	33

FLUORIDE CONTROL DATA - 1991/92

LOCATION - BALDUR
CHEMICAL - NaF 4%
TEST KIT - Hach DR-100
NATURAL FLUORIDE 0.22

FLUORIDATOR - LMI A751
OPERATOR - R. Lussier
TELEPHONE - 535-2047
CALCULATION - 17600

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	1.13	1.21	1.23	1.11	1.33
2.JAN 12-JAN 25	1.12	1.18	1.22	1.11	1.33
3.JAN 26-FEB 08	1.29	1.22	1.23	1.15	1.37
4.FEB 09-FEB 22	1.34	1.23	1.22	1.21	1.43
5.FEB 23-MAR 08	1.20	1.21	1.23	0.99	1.21
6.MAR 09-MAR 22	1.09	1.22	1.22	0.94	1.16
7.MAR 23-APR 05	1.22	1.21	1.24	1.07	1.29
8.APR 06-APR 19	1.19	1.20	1.22	1.05	1.27
9.APR 20-MAY 03	1.22	1.23	1.23	1.12	1.34
10.MAY 04-MAY 17	1.19	1.20	1.23	1.17	1.39
11.MAY 18-MAY 31	1.11	1.18	1.22	1.14	1.36
12.JUN 01-JUN 14	1.10	1.25	1.24	1.26	1.48
13.JUN 15-JUN 28	1.11	1.17	1.22	1.30	1.52
14.JUN 29-JUL 12	1.20	1.26	1.25	1.64	1.86
15.JUL 13-JUL 26	1.23	1.20	1.22	1.37	1.59
16.JUL 27-AUG 09	1.37	1.25	1.21	1.21	1.43
17.AUG 10-AUG 23	1.26	1.22	1.24	1.06	1.28
18.AUG 24-SEP 06	1.28	1.21	1.22	1.14	1.36
19.SEP 07-SEP 20	1.16	1.28	1.23	1.10	1.32
20.SEP 21-OCT 04	1.18	1.20	1.21	1.19	1.41
21.OCT 05-OCT 18	0.92	1.00	1.06	0.95	1.17
22.OCT 19-NOV 01	1.20	1.18	1.18	1.35	1.57
23.NOV 02-NOV 15	1.15	1.12	1.14	0.88	1.10
24.NOV 16-NOV 29	1.00	1.02	1.08	1.03	1.25
25.NOV 30-DEC 13	1.05	1.09	1.07	0.82	1.04
26.DEC 14-DEC 27	1.00	1.07	1.07	0.90	1.12
27.DEC 28-JAN 10	1.12	1.02	1.03	0.88	1.10
28.JAN 11-JAN 24	1.00	1.01	1.04	0.97	1.19
29.JAN 25-FEB 07	1.05	1.10	1.07	0.99	1.21
30.FEB 08-FEB 21	0.91	1.01	1.03	0.89	1.11
31.FEB 22-MAR 06	0.91	1.00	1.04	1.09	1.31
32.MAR 07-MAR 20	1.00	1.00	1.04	0.90	1.12
33.MAR 21-APR 03	1.00	1.09	1.06	1.10	1.32
AVERAGE TO DATE	1.13	1.15	1.16	1.09	1.31
RANGE - LOW	0.91	1.00	1.03	0.82	1.04
TO DATE - HIGH	1.37	1.28	1.25	1.64	1.86
SAMPLES ABOVE LIMITS	2				
SAMPLES BELOW LIMITS	0				
% OUTSIDE LIMITS TO DATE	6.06%				
NUMBER OF SAMPLES TO DATE	33				

FLUORIDE CONTROL DATA - 1991/92

LOCATION - BENITO
CHEMICAL - NaF 4%
TEST KIT - Hach DR-100
NATURAL FLUORIDE 0.3

FLUORIDATOR -LMI Saturator
OPERATOR - R. Kinaschuk
TELEPHONE - 539-2634
CALCULATION - 17600

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11					
2.JAN 12-JAN 25					
3.JAN 26-FEB 08					
4.FEB 09-FEB 22					
5.FEB 23-MAR 08					
6.MAR 09-MAR 22					
7.MAR 23-APR 05					
8.APR 06-APR 19					
9.APR 20-MAY 03					
10.MAY 04-MAY 17					
11.MAY 18-MAY 31					
12.JUN 01-JUN 14					
13.JUN 15-JUN 28					
14.JUN 29-JUL 12					
15.JUL 13-JUL 26					
16.JUL 27-AUG 09	**SYSTEM START-UP: PERIOD 17**				
17.AUG 10-AUG 23	0.67	0.50	0.63	0.73	1.03
18.AUG 24-SEP 06	0.95	1.00	1.00	0.65	0.65
19.SEP 07-SEP 20	0.95	1.00	1.01	0.67	0.97
20.SEP 21-OCT 04	0.95	1.00	0.99	0.69	0.99
21.OCT 05-OCT 18	0.96	1.00	0.95	0.65	0.95
22.OCT 19-NOV 01	0.97	1.00	0.99	0.68	0.98
23.NOV 02-NOV 15	1.00	1.00	1.00	0.71	1.01
24.NOV 16-NOV 29	0.93	1.00	0.95	0.68	0.98
25.NOV 30-DEC 13	0.91	0.90	0.93	0.71	1.01
26.DEC 14-DEC 27	0.92	0.90	0.94	0.70	1.00
27.DEC 28-JAN 10	1.11	0.95	0.91	0.73	0.73
28.JAN 11-JAN 24	0.89	1.00	0.95	0.74	1.04
29.JAN 25-FEB 07	0.92	0.90	0.94	0.71	1.01
30.FEB 08-FEB 21	0.86	0.90	0.90	0.73	1.03
31.FEB 22-MAR 06	0.87	1.00	0.91	0.78	1.08
32.MAR 07-MAR 20	0.93	1.00	0.92	0.81	1.11
33.MAR 21-APR 03	0.88	0.90	0.92	0.82	1.12
AVERAGE TO DATE	0.92	0.93	0.94	0.69	0.96
RANGE - LOW	0.67	0.50	0.63	0.65	0.65
TO DATE - HIGH	1.00	1.00	1.01	0.73	1.03
SAMPLES ABOVE LIMITS	0				
SAMPLES BELOW LIMITS	1				
% OUTSIDE LIMITS TO DATE	5.88%				
NUMBER OF SAMPLES TO DATE	17				

FLUORIDE CONTROL DATA - 1991/92

LOCATION - BIRTLE
CHEMICAL - NaF 4%
TEST KIT - Hach DR-100
NATURAL FLUORIDE 0.26

FLUORIDATOR -LMI - 741
OPERATOR - Darwin Flurry
TELEPHONE - 842-3234
CALCULATION - 17600

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	0.75	1.08	1.07	0.55	0.81
2.JAN 12-JAN 25	0.67	0.80	0.98	0.35	0.61
3.JAN 26-FEB 08	0.52	0.95	0.73	0.52	0.78
4.FEB 09-FEB 22	1.34	1.30	1.15	0.70	0.96
5.FEB 23-MAR 08	1.60	1.50	1.18	1.36	1.62
6.MAR 09-MAR 22	1.05	1.25	1.10	0.78	1.04
7.MAR 23-APR 05	1.29	1.04	1.02	0.86	1.12
8.APR 06-APR 19	1.00	1.10	0.99	0.54	0.80
9.APR 20-MAY 03	0.60	1.00	0.97	0.52	0.78
10.MAY 04-MAY 17	0.62	0.95	1.03	0.40	0.66
11.MAY 18-MAY 31	0.51	0.60	0.86	0.35	0.61
12.JUN 01-JUN 14	1.00	1.10	0.82	0.65	0.91
13.JUN 15-JUN 28	1.74	1.20	1.23	0.92	1.18
14.JUN 29-JUL 12	1.00	1.40	1.21	0.72	0.98
15.JUL 13-JUL 26	0.63	1.00	0.90	0.36	0.62
16.JUL 27-AUG 09	0.83	1.00	1.07	0.44	0.70
17.AUG 10-AUG 23	0.64	1.05	0.86	0.93	1.19
18.AUG 24-SEP 06	4.14	1.70	1.04	0.45	0.71
19.SEP 07-SEP 20	1.37	1.15	0.92	0.51	0.77
20.SEP 21-OCT 04	0.54	0.90	0.79	0.40	0.66
21.OCT 05-OCT 18	0.92	1.35	0.97	0.33	0.59
22.OCT 19-NOV 01	2.70	1.75	1.41	NOT AVAIL	0.00
23.NOV 02-NOV 15	2.00	1.50	1.34	NOT AVAIL	0.00
24.NOV 16-NOV 29	1.59	1.50	1.22	NOT AVAIL	0.00
25.NOV 30-DEC 13	2.28	1.40	1.27	0.68	0.94
26.DEC 14-DEC 27	1.00	1.10	0.81	0.33	0.59
27.DEC 28-JAN 10	2.46	1.35	0.81	0.19	0.45
28.JAN 11-JAN 24	0.66	0.95	0.80	1.74	2.00
29.JAN 25-FEB 07	0.58	1.05	0.86	0.29	0.55
30.FEB 08-FEB 21	0.63	0.40	0.78	0.05	0.31
31.FEB 22-MAR 06	0.63	0.95	0.77	0.59	0.85
32.MAR 07-MAR 20	0.65	1.15	0.91	0.43	0.69
33.MAR 21-APR 03	0.63	0.90	0.83	0.05	0.31
AVERAGE TO DATE	1.17	1.13	0.99	0.57	0.83
RANGE - LOW	0.51	0.40	0.73	0.05	0.31
TO DATE - HIGH	4.14	1.75	1.41	1.74	2.00
SAMPLES ABOVE LIMITS	10				
SAMPLES BELOW LIMITS	15				
% OUTSIDE LIMITS TO DATE	75.76%				
NUMBER OF SAMPLES TO DATE	33	33	33	30	30

NOTE: A problem was identified as a sampling location/engineering problem. Levels have stabilized with relocation of the sampling location and will return to the optimum range in 1992/93.

FLUORIDE CONTROL DATA - 1991/92

LOCATION - BOISSEVAIN
CHEMICAL - NaF 4%
TEST KIT - Hach Filterphotometer
NATURAL FLUORIDE 0.2

FLUORIDATOR -PRECISION
OPERATOR - Barry Chinner
TELEPHONE - 534-6762
CALCULATION - 17600

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	0.77	1.00	1.04	1.02	1.22
2.JAN 12-JAN 25	0.91	1.10	0.89	0.74	0.94
3.JAN 26-FEB 08	1.09	1.10	1.14	0.92	1.12
4.FEB 09-FEB 22	1.05	1.15	1.16	0.95	1.15
5.FEB 23-MAR 08	0.84	1.00	1.02	0.96	1.16
6.MAR 09-MAR 22	1.22	1.15	1.02	0.71	0.91
7.MAR 23-APR 05	1.29	1.00	1.11	0.95	1.15
8.APR 06-APR 19	1.00	1.10	1.13	0.95	1.15
9.APR 20-MAY 03	1.11	1.00	1.16	1.02	1.22
10.MAY 04-MAY 17	1.03	1.00	1.13	0.94	1.14
11.MAY 18-MAY 31	1.09	1.10	1.13	1.07	1.27
12.JUN 01-JUN 14	1.28	1.20	1.19	1.20	1.40
13.JUN 15-JUN 28	1.31	1.20	1.21	1.28	1.48
14.JUN 29-JUL 12	1.14	1.10	1.18	1.10	1.30
15.JUL 13-JUL 26	0.80	1.00	1.08	0.75	0.95
16.JUL 27-AUG 09	0.92	1.00	1.12	0.97	1.17
17.AUG 10-AUG 23	1.00	1.10	1.12	0.94	1.14
18.AUG 24-SEP 06	1.00	0.90	1.28	0.96	1.16
19.SEP 07-SEP 20	1.10	1.20	1.17	1.21	1.41
20.SEP 21-OCT 04	1.10	1.15	1.15	1.06	1.26
21.OCT 05-OCT 18	0.79	1.00	0.97	0.68	0.88
22.OCT 19-NOV 01	0.72	0.90	0.89	0.84	1.04
23.NOV 02-NOV 15	0.70	0.90	0.99	0.37	0.00
24.NOV 16-NOV 29	0.74	1.00	1.00	0.60	0.80
25.NOV 30-DEC 13	0.79	0.90	0.95	0.64	0.84
26.DEC 14-DEC 27	0.89	0.90	0.98	0.60	0.80
27.DEC 28-JAN 10	NOT AVAIL	1.00	0.99	0.80	1.00
28.JAN 11-JAN 24	0.87	1.00	0.97	0.65	0.85
29.JAN 25-FEB 07	0.93	1.10	1.03	0.79	0.99
30.FEB 08-FEB 21	0.88	1.10	1.04	0.74	0.94
31.FEB 22-MAR 06	0.95	1.05	1.02	0.96	1.16
32.MAR 07-MAR 20	0.99	1.05	1.04	0.76	0.96
33.MAR 21-APR 03	1.00	1.10	1.08	0.91	1.11
AVERAGE TO DATE	0.98	1.05	1.07	0.88	1.10
RANGE - LOW	0.70	0.90	0.89	0.37	0.80
TO DATE - HIGH	1.31	1.20	1.28	1.28	1.48
SAMPLES ABOVE LIMITS	1				
SAMPLES BELOW LIMITS	6				
% OUTSIDE LIMITS TO DATE	21.88%				
NUMBER OF SAMPLES TO DATE	32				

FLUORIDE CONTROL DATA - 1991/92

LOCATION - BRANDON
CHEMICAL - Na2SiF6 (Dry)
TEST KIT - Hach Spectrophotometer
NATURAL FLUORIDE 0.2

FLUORIDATOR -W&T A-690
OPERATOR - Herb Gerling
TELEPHONE - 728-7424
CALCULATION - 60000

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	1.08	1.22	1.12	1.01	1.21
2.JAN 12-JAN 25	1.18	1.19	1.15	1.05	1.25
3.JAN 26-FEB 08	1.11	0.99	1.14	1.06	1.26
4.FEB 09-FEB 22	1.12	1.18	1.10	1.05	1.25
5.FEB 23-MAR 08	0.98	NOT AVAIL	0.00	NOT AVAIL	0.00
6.MAR 09-MAR 22	0.98	0.90	1.11	1.02	1.22
7.MAR 23-APR 05	1.12	1.00	1.13	0.99	1.19
8.APR 06-APR 19	1.10	1.21	1.16	1.02	1.22
9.APR 20-MAY 03	1.06	1.15	1.13	1.02	1.22
10.MAY 04-MAY 17	1.10	1.18	1.11	0.96	1.16
11.MAY 18-MAY 31	1.08	0.96	1.14	0.99	1.19
12.JUN 01-JUN 14	1.10	1.15	1.16	0.97	1.17
13.JUN 15-JUN 28	1.03	1.08	1.15	0.93	1.13
14.JUN 29-JUL 12	1.09	1.21	1.15	1.03	1.23
15.JUL 13-JUL 26	0.94	1.18	1.19	1.01	1.21
16.JUL 27-AUG 09	1.04	1.18	1.13	0.98	1.18
17.AUG 10-AUG 23	1.08	1.20	1.12	0.99	1.19
18.AUG 24-SEP 06	1.05	1.12	1.07	NOT AVAIL	0.00
19.SEP 07-SEP 20	1.00	1.20	1.11	1.03	1.23
20.SEP 21-OCT 04	1.03	1.15	1.15	1.03	1.23
21.OCT 05-OCT 18	1.07	1.09	1.08	1.03	1.23
22.OCT 19-NOV 01	1.05	1.18	1.00	1.00	1.20
23.NOV 02-NOV 15	1.05	1.15	1.01	0.99	1.19
24.NOV 16-NOV 29	1.03	1.09	1.07	0.99	1.19
25.NOV 30-DEC 13	0.94	1.00	1.07	1.00	1.20
26.DEC 14-DEC 27	1.00	1.02	0.97	0.96	1.16
27.DEC 28-JAN 10	NOT AVAIL	1.08	1.03	0.96	1.16
28.JAN 11-JAN 24	0.87	0.92	1.03	0.82	1.02
29.JAN 25-FEB 07	1.05	1.00	1.04	0.95	1.15
30.FEB 08-FEB 21	0.95	1.03	1.06	0.94	1.14
31.FEB 22-MAR 06	0.95	0.98	1.03	0.90	1.10
32.MAR 07-MAR 20	1.01	1.03	1.07	0.91	1.11
33.MAR 21-APR 03	1.00	0.94	1.08	0.90	1.10
AVERAGE TO DATE	1.04	1.09	1.10	0.98	1.18
RANGE - LOW	0.87	0.90	0.97	0.82	1.02
TO DATE - HIGH	1.18	1.22	1.19	1.06	1.26
SAMPLES ABOVE LIMITS	0				
SAMPLES BELOW LIMITS	0				
% OUTSIDE LIMITS TO DATE	0.00%				
NUMBER OF SAMPLES TO DATE	32				

FLUORIDE CONTROL DATA - 1991/92

LOCATION - CARMAN
CHEMICAL - NaF 4%
TEST KIT - Hach DR-2
NATURAL FLUORIDE 0.21

FLUORIDATOR -CHEMPULSE
OPERATOR - Dennis Bell
TELEPHONE - 745-2481
CALCULATION - 17600

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	0.95	1.00	1.05	1.41	1.62
2.JAN 12-JAN 25	1.17	1.25	1.25	2.01	2.22
3.JAN 26-FEB 08	1.16	1.25	1.19	1.74	1.95
4.FEB 09-FEB 22	1.16	1.25	1.20	1.58	1.79
5.FEB 23-MAR 08	1.10	1.20	1.14	1.49	1.70
6.MAR 09-MAR 22	1.19	1.25	1.21	2.04	2.25
7.MAR 23-APR 05	0.84	1.10	1.01	1.55	1.76
8.APR 06-APR 19	0.90	1.15	1.11	1.97	2.18
9.APR 20-MAY 03	1.17	1.20	1.21	1.73	1.94
10.MAY 04-MAY 17	0.95	1.05	1.09	1.50	1.71
11.MAY 18-MAY 31	1.11	1.25	1.19	1.49	1.70
12.JUN 01-JUN 14	1.08	1.20	1.15	1.35	1.56
13.JUN 15-JUN 28	1.10	1.20	1.17	1.57	1.78
14.JUN 29-JUL 12	1.12	1.25	1.20	1.62	1.83
15.JUL 13-JUL 26	1.07	1.25	1.16	1.33	1.54
16.JUL 27-AUG 09	1.00	1.20	1.18	1.29	1.50
17.AUG 10-AUG 23	1.00	1.15	1.15	1.52	1.73
18.AUG 24-SEP 06	0.99	1.10	1.08	1.36	1.57
19.SEP 07-SEP 20	1.05	1.15	1.13	1.48	1.69
20.SEP 21-OCT 04	1.12	1.15	1.13	1.55	1.76
21.OCT 05-OCT 18	1.25	1.25	1.25	2.33	2.54
22.OCT 19-NOV 01	1.10	1.10	1.18	1.53	1.74
23.NOV 02-NOV 15	1.10	1.15	1.13	1.50	1.71
24.NOV 16-NOV 29	1.00	1.10	1.09	1.44	1.65
25.NOV 30-DEC 13	1.07	1.15	1.14	1.63	1.84
26.DEC 14-DEC 27	1.19	1.15	1.09	1.71	1.92
27.DEC 28-JAN 10	1.02	1.20	1.15	1.21	1.42
28.JAN 11-JAN 24	1.14	1.20	1.16	1.29	1.50
29.JAN 25-FEB 07	1.20	1.20	1.18	1.18	1.39
30.FEB 08-FEB 21	1.20	1.20	1.21	1.76	1.97
31.FEB 22-MAR 06	1.07	1.20	1.15	1.10	1.31
32.MAR 07-MAR 20	0.88	1.00	1.06	1.03	1.24
33.MAR 21-APR 03	0.95	1.05	1.12	1.10	1.31
AVERAGE TO DATE	1.07	1.17	1.15	1.53	1.74
RANGE - LOW	0.84	1.00	1.01	1.03	1.24
TO DATE - HIGH	1.25	1.25	1.25	2.33	2.54
SAMPLES ABOVE LIMITS	0				
SAMPLES BELOW LIMITS	0				
% OUTSIDE LIMITS TO DATE	0.00%				
NUMBER OF SAMPLES TO DATE	33				

FLUORIDE CONTROL DATA - 1991/92

LOCATION - CRANBERRY PORTAGE
CHEMICAL - NaF 4%
TEST KIT - Hach DR-100
NATURAL FLUORIDE 0.1

FLUORIDATOR -W&T A-745
OPERATOR - Dixie Nagy
TELEPHONE - 472-3219
CALCULATION - 17600

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	1.08	1.11	1.14	NOT AVAIL	0.00
2.JAN 12-JAN 25	1.00	0.92	0.96	1.14	1.24
3.JAN 26-FEB 08	1.25	1.22	1.24	1.14	1.24
4.FEB 09-FEB 22	1.18	1.25	1.20	1.23	1.33
5.FEB 23-MAR 08	1.04	NOT AVAIL	1.08	0.99	1.09
6.MAR 09-MAR 22	1.09	1.10	1.13	1.18	1.28
7.MAR 23-APR 05	1.07	1.19	1.14	1.27	1.37
8.APR 06-APR 19	1.25	1.39	1.22	1.20	1.30
9.APR 20-MAY 03	1.08	1.22	1.12	1.16	1.26
10.MAY 04-MAY 17	1.06	1.10	1.12	1.10	1.20
11.MAY 18-MAY 31	1.12	1.15	1.16	1.09	1.19
12.JUN 01-JUN 14	0.96	0.91	1.00	1.06	1.16
13.JUN 15-JUN 28	1.30	1.30	1.27	1.17	1.27
14.JUN 29-JUL 12	1.30	1.20	1.26	NOT AVAIL	0.00
15.JUL 13-JUL 26	1.32	1.09	1.27	1.31	1.41
16.JUL 27-AUG 09	1.15	1.00	1.06	1.21	1.31
17.AUG 10-AUG 23	0.86	1.12	0.95	1.21	1.31
18.AUG 24-SEP 06	1.35	1.30	1.27	1.22	1.32
19.SEP 07-SEP 20	1.13	1.23	1.26	1.03	1.13
20.SEP 21-OCT 04	1.00	0.85	1.14	1.02	1.12
21.OCT 05-OCT 18	1.15	1.27	1.19	0.91	1.01
22.OCT 19-NOV 01	1.20	1.12	1.19	0.72	0.82
23.NOV 02-NOV 15	1.00	1.10	1.00	0.83	0.93
24.NOV 16-NOV 29	0.89	0.92	0.90	0.93	1.03
25.NOV 30-DEC 13	1.18	1.19	1.16	0.74	0.84
26.DEC 14-DEC 27	1.10	1.20	1.14	0.37	0.47
27.DEC 28-JAN 10	0.83	0.95	0.88	0.16	0.26
28.JAN 11-JAN 24	0.69	0.80	0.79	0.76	0.86
29.JAN 25-FEB 07	1.20	1.20	1.15	0.74	0.84
30.FEB 08-FEB 21	1.07	1.12	1.09	0.79	0.89
31.FEB 22-MAR 06	1.00	1.00	1.01	0.96	1.06
32.MAR 07-MAR 20	1.29	1.40	1.25	0.78	0.88
33.MAR 21-APR 03	1.18	1.23	1.14	0.76	0.86
AVERAGE TO DATE	1.10	1.13	1.12	0.97	1.07
RANGE - LOW	0.69	0.80	0.79	0.16	0.26
TO DATE - HIGH	1.35	1.40	1.27	1.31	1.41
SAMPLES ABOVE LIMITS	2				
SAMPLES BELOW LIMITS	1				
% OUTSIDE LIMITS TO DATE	15.15%				
NUMBER OF SAMPLES TO DATE	33				

FLUORIDE CONTROL DATA - 1991/92

LOCATION - DAUPHIN
CHEMICAL - H2SiF6 25%
TEST KIT - Hach DR-100
NATURAL FLUORIDE 0.14

FLUORIDATOR -W&T A-690 pac
OPERATOR - Eugene Mayuk
TELEPHONE - 638-3601
CALCULATION - 18234

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	1.05	1.25	1.24	1.04	1.17
2.JAN 12-JAN 25	0.95	1.00	1.11	0.92	1.06
3.JAN 26-FEB 08	0.95	1.05	1.12	0.99	1.17
4.FEB 09-FEB 22	0.82	1.10	1.07	0.99	1.14
5.FEB 23-MAR 08	1.17	1.00	1.09	1.04	1.18
6.MAR 09-MAR 22	0.89	1.00	1.08	1.09	1.21
7.MAR 23-APR 05	1.07	1.10	1.03	1.20	1.34
8.APR 06-APR 19	1.09	1.20	1.16	1.42	1.59
9.APR 20-MAY 03	1.03	1.05	1.18	1.36	1.50
10.MAY 04-MAY 17	1.75	1.10	1.13	1.41	1.55
11.MAY 18-MAY 31	1.24	1.20	1.28	1.43	1.61
12.JUN 01-JUN 14	1.18	1.15	1.21	1.23	1.46
13.JUN 15-JUN 28	1.11	1.10	1.16	1.21	1.42
14.JUN 29-JUL 12	1.18	1.35	1.29	1.23	1.37
15.JUL 13-JUL 26	1.15	1.20	1.26	1.23	1.38
16.JUL 27-AUG 09	1.24	1.20	1.26	1.39	1.53
17.AUG 10-AUG 23	1.17	1.20	1.20	1.32	1.53
18.AUG 24-SEP 06	1.28	1.20	1.23	1.24	1.42
19.SEP 07-SEP 20	1.25	1.20	1.17	0.97	1.13
20.SEP 21-OCT 04	1.09	1.20	1.15	1.29	1.46
21.OCT 05-OCT 18	0.95	1.00	1.01	1.14	1.30
22.OCT 19-NOV 01	1.05	1.05	1.02	1.26	1.42
23.NOV 02-NOV 15	1.05	1.10	1.08	1.21	1.35
24.NOV 16-NOV 29	1.00	1.00	1.04	1.13	1.25
25.NOV 30-DEC 13	0.86	1.05	1.04	1.20	1.30
26.DEC 14-DEC 27	1.10	1.05	1.05	1.20	1.33
27.DEC 28-JAN 10	1.15	1.10	1.14	1.19	1.29
28.JAN 11-JAN 24	1.08	1.05	1.15	1.19	1.30
29.JAN 25-FEB 07	1.00	1.10	1.14	1.19	1.30
30.FEB 08-FEB 21	1.00	1.10	1.10	1.17	1.29
31.FEB 22-MAR 06	1.07	1.10	1.10	1.13	1.27
32.MAR 07-MAR 20	1.06	1.10	1.09	1.20	1.32
33.MAR 21-APR 03	1.05	1.09	1.15	1.20	1.32
AVERAGE TO DATE	1.09	1.11	1.14	1.19	1.34
RANGE - LOW	0.82	1.00	1.01	0.92	1.06
TO DATE - HIGH	1.75	1.35	1.29	1.43	1.61
SAMPLES ABOVE LIMITS	1				
SAMPLES BELOW LIMITS	0				
% OUTSIDE LIMITS TO DATE	3.03%				
NUMBER OF SAMPLES TO DATE	33				

FLUORIDE CONTROL DATA - 1991/92

LOCATION - DELORAINE
CHEMICAL - NaF 4%
TEST KIT - Hach DR-2
NATURAL FLUORIDE 0.16

FLUORIDATOR -W&T A-745
OPERATOR - Bill Arnold
TELEPHONE - 747-2062
CALCULATION - 13200

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	0.97	1.10	1.21	1.79	1.95
2.JAN 12-JAN 25	1.27	1.30	1.31	1.79	1.95
3.JAN 26-FEB 08	1.20	1.25	1.34	1.79	1.95
4.FEB 09-FEB 22	1.00	1.20	1.24	1.76	1.92
5.FEB 23-MAR 08	1.12	1.20	1.21	1.76	1.92
6.MAR 09-MAR 22	1.16	1.10	1.26	2.33	2.49
7.MAR 23-APR 05	1.40	1.20	1.27	1.45	1.61
8.APR 06-APR 19	1.33	1.30	1.25	1.23	1.39
9.APR 20-MAY 03	1.05	1.10	1.16	1.38	1.54
10.MAY 04-MAY 17	1.00	1.00	1.14	1.71	1.87
11.MAY 18-MAY 31	1.03	1.10	1.19	1.53	1.69
12.JUN 01-JUN 14	1.00	1.10	1.18	1.69	1.85
13.JUN 15-JUN 28	1.19	1.00	1.15	1.49	1.65
14.JUN 29-JUL 12	1.08	1.00	1.03	1.46	1.62
15.JUL 13-JUL 26	1.59	1.00	1.09	1.85	2.01
16.JUL 27-AUG 09	1.75	1.00	1.11	1.22	1.38
17.AUG 10-AUG 23	1.83	1.00	1.04	1.55	1.71
18.AUG 24-SEP 06	1.13	1.10	1.01	1.85	2.01
19.SEP 07-SEP 20	0.91	1.00	1.05	1.71	1.87
20.SEP 21-OCT 04	0.92	1.00	1.09	1.42	1.58
21.OCT 05-OCT 18	1.07	1.10	1.18	1.58	1.74
22.OCT 19-NOV 01	0.97	1.00	1.08	1.47	1.63
23.NOV 02-NOV 15	0.85	1.00	1.10	1.51	1.67
24.NOV 16-NOV 29	1.00	1.00	1.12	1.57	1.73
25.NOV 30-DEC 13	1.00	1.10	1.09	1.47	1.63
26.DEC 14-DEC 27	1.05	1.10	1.09	1.14	1.30
27.DEC 28-JAN 10	1.05	1.10	1.11	1.21	1.37
28.JAN 11-JAN 24	1.05	1.10	1.14	2.32	2.48
29.JAN 25-FEB 07	0.82	1.10	1.03	1.20	1.36
30.FEB 08-FEB 21	0.80	1.00	1.10	0.90	1.06
31.FEB 22-MAR 06	0.77	1.00	1.00	1.08	1.24
32.MAR 07-MAR 20	0.87	1.00	1.06	0.74	0.90
33.MAR 21-APR 03	1.05	1.00	1.08	1.06	1.22
AVERAGE TO DATE	1.10	1.08	1.14	1.52	1.68
RANGE - LOW	0.77	1.00	1.00	0.74	0.90
TO DATE - HIGH	1.83	1.30	1.34	2.33	2.49
SAMPLES ABOVE LIMITS	5				
SAMPLES BELOW LIMITS	1				
% OUTSIDE LIMITS TO DATE	18.18%				
NUMBER OF SAMPLES TO DATE	33				

NOTE: Deloraine converted from a batch mix system to an upflow saturator system in January 1992.

FLUORIDE CONTROL DATA - 1991/92

LOCATION - ERICKSON
CHEMICAL - NaF 4%
TEST KIT - Hach DR-100
NATURAL FLUORIDE 0.23

FLUORIDATOR - LMI A751
OPERATOR - Ken Podruski
TELEPHONE - 636-2971
CALCULATION - 17600

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	1.12	1.20	1.21	1.66	1.89
2.JAN 12-JAN 25	1.12	1.19	1.20	1.51	1.74
3.JAN 26-FEB 08	1.06	1.15	1.10	1.47	1.70
4.FEB 09-FEB 22	1.21	1.22	1.23	1.42	1.65
5.FEB 23-MAR 08	1.15	1.21	1.18	1.56	1.79
6.MAR 09-MAR 22	1.08	1.17	1.17	1.58	1.81
7.MAR 23-APR 05	1.21	1.18	1.21	1.49	1.72
8.APR 06-APR 19	1.19	1.14	1.19	1.49	1.72
9.APR 20-MAY 03	1.15	1.16	1.20	1.52	1.75
10.MAY 04-MAY 17	1.19	1.18	1.20	1.23	1.46
11.MAY 18-MAY 31	1.08	1.11	1.14	1.18	1.41
12.JUN 01-JUN 14	1.20	1.14	1.20	1.45	1.68
13.JUN 15-JUN 28	1.12	1.18	1.17	1.44	1.67
14.JUN 29-JUL 14	1.15	1.20	1.18	1.24	1.47
15.JUL 13-JUL 26	1.23	1.17	1.21	1.28	1.51
16.JUL 27-AUG 09	1.06	1.12	1.14	1.18	1.41
17.AUG 10-AUG 23	1.10	1.16	1.20	1.16	1.39
18.AUG 24-SEP 06	1.03	1.12	1.17	1.58	1.81
19.SEP 07-SEP 20	1.16	1.20	1.20	1.11	1.34
20.SEP 21-OCT 04	1.16	1.21	1.19	1.24	1.47
21.OCT 05-OCT 18	1.17	1.18	1.18	1.36	1.59
22.OCT 19-NOV 01	1.10	1.14	1.16	1.17	1.40
23.NOV 02-NOV 15	1.07	1.08	1.12	1.24	1.47
24.NOV 16-NOV 29	1.05	1.10	1.12	1.60	1.83
25.NOV 30-DEC 13	1.07	1.14	1.11	0.78	1.01
26.DEC 14-DEC 27	1.10	1.08	1.05	1.34	1.57
27.DEC 28-JAN 10	1.05	1.00	1.07	1.69	1.92
28.JAN 11-JAN 24	1.07	1.16	1.11	1.02	1.25
29.JAN 25-FEB 07	0.99	1.02	1.05	1.20	1.43
30.FEB 08-FEB 21	1.10	1.01	1.08	1.19	1.42
31.FEB 22-MAR 06	1.05	1.18	1.04	1.12	1.35
32.MAR 07-MAR 20	0.96	1.00	1.02	1.01	1.24
33.MAR 21-APR 03	0.93	1.01	1.03	1.30	1.53
AVERAGE TO DATE	1.11	1.14	1.15	1.33	1.56
RANGE - LOW	0.93	1.00	1.02	0.78	1.01
TO DATE - HIGH	1.23	1.22	1.23	1.69	1.92
SAMPLES ABOVE LIMITS	0				
SAMPLES BELOW LIMITS	0				
% OUTSIDE LIMITS TO DATE	0.00%				
NUMBER OF SAMPLES TO DATE	33				

FLUORIDE CONTROL DATA - 1991/92

LOCATION - FLIN FLON
CHEMICAL - H2SiF6 25%
TEST KIT - Hach DR-100
NATURAL FLUORIDE 0.1

FLUORIDATOR - Prominent
OPERATOR - Harold Harris
TELEPHONE - 687-7511
CALCULATION - 40100

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	1.20	1.16	1.16	1.09	1.19
2.JAN 12-JAN 25	1.12	1.20	1.19	1.02	1.12
3.JAN 26-FEB 08	1.12	1.15	1.15	1.02	1.12
4.FEB 09-FEB 22	1.08	1.12	1.13	0.97	1.07
5.FEB 23-MAR 08	1.15	1.15	1.07	0.99	1.09
6.MAR 09-MAR 22	1.04	1.09	1.09	1.01	1.11
7.MAR 23-APR 05	1.04	1.08	1.10	1.05	1.15
8.APR 06-APR 19	1.00	1.05	1.07	1.06	1.16
9.APR 20-MAY 03	0.98	1.10	1.05	1.08	1.18
10.MAY 04-MAY 17	1.00	1.03	1.05	1.06	1.16
11.MAY 18-MAY 31	1.12	1.20	1.13	1.07	1.17
12.JUN 01-JUN 14	1.24	1.24	1.28	1.06	1.16
13.JUN 15-JUN 28	1.25	1.10	1.29	1.11	1.21
14.JUN 29-JUL 12	1.32	1.05	1.18	1.12	1.22
15.JUL 13-JUL 26	1.28	1.26	1.19	1.12	1.22
16.JUL 27-AUG 09	1.50	1.36	1.38	1.50	1.60
17.AUG 10-AUG 23	1.50	1.12	1.22	1.28	1.38
18.AUG 24-SEP 06	1.45	1.42	1.17	1.24	1.34
19.SEP 07-SEP 20	0.73	0.83	0.86	0.75	0.85
20.SEP 21-OCT 04	1.18	1.12	1.17	1.05	1.15
21.OCT 05-OCT 18	1.13	1.12	1.12	1.01	1.11
22.OCT 19-NOV 01	1.10	1.01	1.06	0.99	1.09
23.NOV 02-NOV 15	1.04	1.03	1.02	0.97	1.07
24.NOV 16-NOV 29	1.14	1.12	1.14	1.01	1.11
25.NOV 30-DEC 13	1.05	1.04	0.00	0.99	1.09
26.DEC 14-DEC 27	1.05	1.00	1.02	0.86	0.96
27.DEC 28-JAN 10	0.95	1.00	0.97	0.88	0.98
28.JAN 11-JAN 24	0.95	0.96	0.98	0.85	0.95
29.JAN 25-FEB 07	1.12	1.00	1.01	0.85	0.95
30.FEB 08-FEB 21	0.99	0.96	1.01	0.83	0.93
31.FEB 22-MAR 06	1.00	0.99	0.98	0.84	0.94
32.MAR 07-MAR 20	0.96	0.99	0.98	0.79	0.89
33.MAR 21-APR 03	0.93	0.99	1.03	0.79	0.89
AVERAGE TO DATE	1.11	1.09	1.10	1.01	1.11
RANGE - LOW	0.73	0.83	0.86	0.75	0.85
TO DATE - HIGH	1.50	1.42	1.38	1.50	1.60
SAMPLES ABOVE LIMITS	4				
SAMPLES BELOW LIMITS	1				
% OUTSIDE LIMITS TO DATE	15.15%				
NUMBER OF SAMPLES TO DATE	33				

FLUORIDE CONTROL DATA - 1991/92

LOCATION - GILBERT PLAINS
CHEMICAL - NaF 4%
TEST KIT - HACH DR-100
NATURAL FLUORIDE 0.19

FLUORIDATOR -LM1 A-741
OPERATOR - Lloyd Beckley
TELEPHONE - 548-2149
CALCULATION - 17600

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	1.00	1.10	1.09	0.27	0.46
2.JAN 12-JAN 25	1.05	1.10	1.13	0.11	0.30
3.JAN 26-FEB 08	1.00	1.15	1.16	0.11	0.30
4.FEB 09-FEB 22	1.10	1.20	1.20	0.75	0.94
5.FEB 23-MAR 08	1.17	1.22	1.27	1.70	1.89
6.MAR 09-MAR 22	1.07	1.28	1.20	0.45	0.64
7.MAR 23-APR 05	1.15	1.20	1.22	1.10	1.29
8.APR 06-APR 19	1.15	1.15	1.21	1.59	1.78
9.APR 20-MAY 03	1.22	1.28	1.29	0.28	0.47
10.MAY 04-MAY 17	1.15	1.20	1.22	1.50	1.69
11.MAY 18-MAY 31	1.24	1.30	1.29	1.13	1.32
12.JUN 01-JUN 14	1.10	1.25	1.24	1.09	1.28
13.JUN 15-JUN 28	1.08	1.20	1.19	1.04	1.23
14.JUN 29-JUL 12	1.10	1.27	1.13	0.95	1.14
15.JUL 13-JUL 26	0.99	1.28	1.20	0.98	1.17
16.JUL 27-AUG 09	0.98	1.10	1.08	0.27	0.46
17.AUG 10-AUG 23	1.10	1.20	1.20	0.67	0.86
18.AUG 24-SEP 06	1.07	1.18	1.15	0.13	0.32
19.SEP 07-SEP 20	1.04	1.15	1.14	0.10	0.29
20.SEP 21-OCT 04	1.00	1.10	1.14	0.07	0.26
21.OCT 05-OCT 18	1.00	1.10	1.10	0.14	0.33
22.OCT 19-NOV 01	0.95	1.00	0.97	0.10	0.29
23.NOV 02-NOV 15	0.67	0.88	0.75	0.24	0.43
24.NOV 16-NOV 29	1.00	1.00	1.08	0.08	0.27
25.NOV 30-DEC 13	0.91	0.90	1.06	0.07	0.26
26.DEC 14-DEC 27	1.00	1.10	1.08	0.11	0.30
27.DEC 28-JAN 10	0.97	1.05	1.10	0.09	0.28
28.JAN 11-JAN 24	0.95	1.10	1.10	0.10	0.29
29.JAN 25-FEB 07	0.95	1.05	1.11	0.09	0.28
30.FEB 08-FEB 21	0.95	1.05	1.02	0.09	0.28
31.FEB 22-MAR 06	0.90	1.00	0.94	0.10	0.29
32.MAR 07-MAR 20	0.88	1.05	1.00	0.09	0.28
33.MAR 21-APR 03	0.93	1.10	1.12	0.10	0.29
AVERAGE TO DATE	1.02	1.13	1.13	0.48	0.67
RANGE - LOW	0.67	0.88	0.75	0.07	0.26
TO DATE - HIGH	1.24	1.30	1.29	1.70	1.89
SAMPLES ABOVE LIMITS	0				
SAMPLES BELOW LIMITS	1				
% OUTSIDE LIMITS TO DATE	3.03%				
NUMBER OF SAMPLES TO DATE	33				

FLUORIDE CONTROL DATA - 1991/92

LOCATION - GILLAM
CHEMICAL - NaF 4%
TEST KIT - Hach DR-100
NATURAL FLUORIDE 0.1

FLUORIDATOR -Liq-Metronics
OPERATOR - Bruce Caister
TELEPHONE - 652-2377
CALCULATION - 18000

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	1.00	1.30	1.00	0.05	0.15
2.JAN 12-JAN 25	0.88	1.00	1.05	NOT AVAIL	0.00
3.JAN 26-FEB 08	1.00	0.90	0.85	NOT AVAIL	0.00
4.FEB 09-FEB 22	NOT AVAIL	NOT AVAIL	0.00	NOT AVAIL	0.00
5.FEB 23-MAR 08	NOT AVAIL	NOT AVAIL	0.00	NOT AVAIL	0.00
6.MAR 09-MAR 22	1.04	1.20	1.13	NOT AVAIL	0.00
7.MAR 23-APR 05	1.30	1.10	1.06	NOT AVAIL	0.00
8.APR 06-APR 19	1.40	1.20	1.08	0.15	0.25
9.APR 20-MAY 03	1.35	1.30	1.23	0.15	0.25
10.MAY 04-MAY 17	1.34	1.30	1.16	0.17	0.27
11.MAY 18-MAY 31	1.25	1.20	1.14	0.17	0.27
12.JUN 01-JUN 14	NOT AVAIL	NOT AVAIL	0.00	NOT AVAIL	0.00
13.JUN 15-JUN 28	NOT AVAIL	NOT AVAIL	0.00	NOT AVAIL	0.00
14.JUN 29-JUL 12	1.25	NOT AVAIL	1.18	NOT AVAIL	0.00
15.JUL 13-JUL 26	1.37	NOT AVAIL	0.99	NOT AVAIL	0.00
16.JUL 27-AUG 09	1.08	NOT AVAIL	1.04	NOT AVAIL	0.00
17.AUG 10-AUG 23	NOT AVAIL	NOT AVAIL	0.00	NOT AVAIL	0.00
18.AUG 24-SEP 06	NOT AVAIL	NOT AVAIL	0.00	NOT AVAIL	0.00
19.SEP 07-SEP 20	1.10	1.00	1.13	0.01	0.11
20.SEP 21-OCT 04	1.27	1.20	1.21	0.00	0.10
21.OCT 05-OCT 18	1.41	1.20	1.21	0.05	0.15
22.OCT 19-NOV 01	1.25	1.10	1.14	NOT AVAIL	0.10
23.NOV 02-NOV 15	1.25	1.20	1.11	0.07	0.17
24.NOV 16-NOV 29	1.14	1.20	1.13	0.05	0.15
25.NOV 30-DEC 13	1.16	NOT AVAIL	1.07	NOT AVAIL	0.00
26.DEC 14-DEC 27	NOT AVAIL	NOT AVAIL	0.00	NOT AVAIL	0.00
27.DEC 28-JAN 10	NOT AVAIL	NOT AVAIL	0.00	NOT AVAIL	0.00
28.JAN 11-JAN 24	1.11	1.20	1.07	0.03	0.13
29.JAN 25-FEB 07	1.19	1.10	1.09	0.07	0.17
30.FEB 08-FEB 21	NOT AVAIL	NOT AVAIL	0.00	NOT AVAIL	0.00
31.FEB 22-MAR 06	1.12	1.15	1.08	0.07	0.17
32.MAR 07-MAR 20	1.09	1.10	1.03	0.06	0.16
33.MAR 21-APR 03	1.05	1.00	1.06	0.06	0.16
AVERAGE TO DATE	1.18	1.15	1.09	0.08	0.17
RANGE - LOW	0.88	0.90	0.85	0.00	0.10
TO DATE - HIGH	1.41	1.30	1.23	0.17	0.27

SAMPLES ABOVE LIMITS	5
SAMPLES BELOW LIMITS	0
% OUTSIDE LIMITS TO DATE	20.83%
NUMBER OF SAMPLES TO DATE	24

FLUORIDE CONTROL DATA - 1991/92

LOCATION - GIMLI INDUSTRIAL PARK (R.M.)
CHEMICAL - NaF 4%
TEST KIT - Hach DR-100
NATURAL FLUORIDE 0.43

FLUORIDATOR -W&T A-747 Sat
OPERATOR - R. Bezdietny
TELEPHONE - 642-8593
CALCULATION - 18000

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	1.15	1.14	1.16	0.67	1.10
2.JAN 12-JAN 25	1.16	1.17	1.17	0.71	1.14
3.JAN 26-FEB 08	1.00	1.16	1.17	0.69	1.12
4.FEB 09-FEB 22	1.13	1.14	1.15	0.67	1.10
5.FEB 23-MAR 08	1.12	1.15	1.16	0.69	1.12
6.MAR 09-MAR 22	1.16	1.14	1.16	0.72	1.15
7.MAR 23-APR 05	1.20	1.18	1.13	0.78	1.21
8.APR 06-APR 19	1.19	1.15	1.16	0.71	1.14
9.APR 20-MAY 03	1.15	1.17	1.16	0.73	1.16
10.MAY 04-MAY 17	1.17	1.17	1.17	0.69	1.12
11.MAY 18-MAY 31	1.19	1.18	1.17	0.87	1.30
12.JUN 01-JUN 14	1.18	1.14	1.18	0.72	1.15
13.JUN 15-JUN 28	1.19	1.15	1.15	0.69	1.12
14.JUN 29-JUL 12	1.18	1.14	1.15	0.75	1.18
15.JUL 13-JUL 26	1.20	1.16	1.09	0.73	1.16
16.JUL 27-AUG 09	1.15	1.15	1.17	0.66	1.09
17.AUG 10-AUG 23	1.19	1.16	1.08	0.67	1.10
18.AUG 24-SEP 06	1.23	1.17	1.17	0.74	1.17
19.SEP 07-SEP 20	1.23	1.16	1.17	0.83	1.26
20.SEP 21-OCT 04	1.16	1.19	1.18	0.74	1.17
21.OCT 05-OCT 18	1.15	1.16	1.16	0.72	1.15
22.OCT 19-NOV 01	1.20	1.10	1.15	0.73	1.16
23.NOV 02-NOV 15	1.18	1.18	1.14	0.77	1.20
24.NOV 16-NOV 29	1.17	1.17	1.15	0.82	1.25
25.NOV 30-DEC 13	1.21	1.14	1.15	0.74	1.17
26.DEC 14-DEC 27	1.19	1.16	1.14	0.68	1.11
27.DEC 28-JAN 10	1.19	1.18	1.15	0.75	1.18
28.JAN 11-JAN 24	1.23	1.13	1.13	0.74	1.17
29.JAN 25-FEB 07	1.18	1.14	1.16	0.70	1.13
30.FEB 08-FEB 21	1.07	1.10	1.11	0.64	1.07
31.FEB 22-MAR 06	1.07	1.08	1.10	0.64	1.07
32.MAR 07-MAR 20	1.10	1.08	1.09	0.78	1.21
33.MAR 21-APR 03	1.09	1.12	1.10	0.63	1.06
AVERAGE TO DATE	1.16	1.15	1.15	0.72	1.15
RANGE - LOW	1.00	1.08	1.08	0.63	1.06
TO DATE - HIGH	1.23	1.19	1.18	0.87	1.30
SAMPLES ABOVE LIMITS	0				
SAMPLES BELOW LIMITS	0				
% OUTSIDE LIMITS TO DATE	0.00%				
NUMBER OF SAMPLES TO DATE	33				

FLUORIDE CONTROL DATA - 1991/92

LOCATION - GIMLI (TOWN)
CHEMICAL - NaF 4%
TEST KIT - Hach DR-100
NATURAL FLUORIDE 0.45

FLUORIDATOR -CHEMPULSE
OPERATOR - B.Gudbjartson
TELEPHONE - 642-7443
CALCULATION - 17600

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	0.80	1.02	1.02	0.71	1.16
2.JAN 12-JAN 25	1.15	1.02	1.02	0.40	0.85
3.JAN 26-FEB 08	1.12	1.03	1.02	0.64	1.09
4.FEB 09-FEB 22	1.05	1.02	1.02	0.55	1.00
5.FEB 23-MAR 08	1.04	1.02	1.02	0.54	0.99
6.MAR 09-MAR 22	0.93	1.02	1.02	0.72	1.17
7.MAR 23-APR 05	0.95	1.02	1.02	0.60	1.05
8.APR 06-APR 19	1.05	1.02	0.94	0.53	0.98
9.APR 20-MAY 03	1.00	1.02	1.02	1.03	1.48
10.MAY 04-MAY 17	0.91	1.02	1.02	0.09	0.54
11.MAY 18-MAY 31	0.88	1.02	1.02	0.61	1.06
12.JUN 01-JUN 14	0.93	1.01	1.02	0.67	1.12
13.JUN 15-JUN 28	0.87	1.00	1.01	0.55	1.00
14.JUN 29-JUL 12	0.81	1.02	1.02	1.47	1.92
15.JUL 13-JUL 26	1.03	1.02	0.87	0.86	1.31
16.JUL 27-AUG 09	1.02	1.01	1.02	0.60	1.05
17.AUG 10-AUG 23	0.92	1.02	1.02	0.92	1.37
18.AUG 24-SEP 06	1.28	1.03	1.02	0.11	0.56
19.SEP 07-SEP 20	1.03	1.03	1.02	0.51	0.96
20.SEP 21-OCT 04	1.14	1.03	1.02	0.83	1.28
21.OCT 05-OCT 18	1.04	1.02	1.02	0.68	1.13
22.OCT 19-NOV 01	1.00	1.01	1.02	0.68	1.13
23.NOV 02-NOV 15	1.10	1.01	1.02	0.63	1.08
24.NOV 16-NOV 29	0.88	1.02	1.02	0.09	0.54
25.NOV 30-DEC 13	0.95	1.02	1.02	0.04	0.49
26.DEC 14-DEC 27	1.05	1.02	1.02	0.01	0.46
27.DEC 28-JAN 10	1.85	1.02	1.02	0.05	0.50
28.JAN 11-JAN 24	1.15	1.02	1.02	0.09	0.54
29.JAN 25-FEB 07	1.07	1.03	1.02	0.71	1.16
30.FEB 08-FEB 21	0.95	1.02	1.02	0.53	0.98
31.FEB 22-MAR 06	0.90	1.02	1.02	0.89	1.34
32.MAR 07-MAR 20	0.94	1.02	1.02	0.53	0.98
33.MAR 21-APR 03	1.13	1.02	1.02	0.03	0.48
AVERAGE TO DATE	1.03	1.02	1.01	0.54	0.99
RANGE - LOW	0.80	1.00	0.87	0.01	0.46
TO DATE - HIGH	1.85	1.03	1.02	1.47	1.92
SAMPLES ABOVE LIMITS	1				
SAMPLES BELOW LIMITS	0				
% OUTSIDE LIMITS TO DATE	3.03%				
NUMBER OF SAMPLES TO DATE	33				

FLUORIDE CONTROL DATA - 1991/92

LOCATION - GLADSTONE
CHEMICAL - NaF 4%
TEST KIT - Hach DR-2000
NATURAL FLUORIDE 0.22

FLUORIDATOR -W&T A-745
OPERATOR - B. Richardson
TELEPHONE - 385-2017
CALCULATION - 17600

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	1.15	1.20	1.07	0.62	0.84
2.JAN 12-JAN 25	1.17	1.20	1.14	0.83	1.05
3.JAN 26-FEB 08	1.11	1.20	1.12	0.86	1.08
4.FEB 09-FEB 22	1.22	1.22	1.15	0.78	1.00
5.FEB 23-MAR 08	1.13	1.22	1.14	0.92	1.14
6.MAR 09-MAR 22	1.12	1.17	1.15	0.70	0.92
7.MAR 23-APR 05	1.07	1.15	1.12	0.75	0.97
8.APR 06-APR 19	1.15	1.20	1.11	1.11	1.33
9.APR 20-MAY 03	1.18	1.17	1.16	0.79	1.01
10.MAY 04-MAY 17	1.16	1.12	1.13	0.90	1.12
11.MAY 18-MAY 31	1.12	1.10	1.14	0.95	1.17
12.JUN 01-JUN 14	1.14	1.15	1.13	0.80	1.02
13.JUN 15-JUN 28	1.05	1.10	1.16	1.01	1.23
14.JUN 29-JUL 12	0.95	1.09	1.14	0.79	1.01
15.JUL 13-JUL 26	1.00	1.00	1.05	0.75	0.97
16.JUL 27-AUG 09	1.02	1.02	1.14	0.89	1.11
17.AUG 10-AUG 23	1.04	0.95	1.05	0.64	0.86
18.AUG 24-SEP 06	1.07	1.02	1.08	0.82	1.04
19.SEP 07-SEP 20	1.07	1.07	1.10	0.96	1.18
20.SEP 21-OCT 04	1.00	1.04	1.06	0.84	1.06
21.OCT 05-OCT 18	0.97	1.02	1.01	0.77	0.99
22.OCT 19-NOV 01	1.00	1.02	0.91	0.73	0.95
23.NOV 02-NOV 15	1.04	1.10	1.12	0.78	1.00
24.NOV 16-NOV 29	1.00	0.98	1.03	0.79	1.01
25.NOV 30-DEC 13	1.07	1.17	1.01	0.82	1.04
26.DEC 14-DEC 27	1.05	1.15	1.01	0.84	1.06
27.DEC 28-JAN 10	0.95	1.09	1.07	0.83	1.05
28.JAN 11-JAN 24	1.05	0.97	0.99	0.76	0.98
29.JAN 25-FEB 07	0.96	1.07	0.98	0.75	0.97
30.FEB 08-FEB 21	0.99	1.11	0.98	0.72	0.94
31.FEB 22-MAR 06	0.99	1.10	0.97	0.75	0.97
32.MAR 07-MAR 20	0.92	1.08	0.81	0.79	1.01
33.MAR 21-APR 03	0.90	1.10	0.97	0.79	1.01
AVERAGE TO DATE	1.05	1.10	1.07	0.81	1.03
RANGE - LOW	0.90	0.95	0.81	0.62	0.84
TO DATE - HIGH	1.22	1.22	1.16	1.11	1.33
SAMPLES ABOVE LIMITS	0				
SAMPLES BELOW LIMITS	0				
% OUTSIDE LIMITS TO DATE	0.00%				
NUMBER OF SAMPLES TO DATE	33				

FLUORIDE CONTROL DATA - 1991/92

LOCATION - HANIOTA
CHEMICAL - NaF 4%
TEST KIT - Hach DR-100
NATURAL FLUORIDE 0.29

FLUORIDATOR - LMI A751
OPERATOR - Les Kirk
TELEPHONE - 764-2496
CALCULATION - 17600

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	1.12	1.30	1.25	0.88	1.17
2.JAN 12-JAN 25	1.15	1.25	1.22	0.87	1.16
3.JAN 26-FEB 08	1.11	1.20	1.27	0.85	1.14
4.FEB 09-FEB 22	1.09	1.20	1.24	0.87	1.16
5.FEB 23-MAR 08	1.12	1.30	1.24	0.86	1.15
6.MAR 09-MAR 22	1.16	1.20	1.22	0.87	1.16
7.MAR 23-APR 05	1.18	1.10	1.10	0.88	1.17
8.APR 06-APR 19	1.05	1.25	1.19	0.86	1.15
9.APR 20-MAY 03	1.12	1.45	1.26	0.88	1.17
10.MAY 04-MAY 17	1.30	1.40	1.18	0.88	1.17
11.MAY 18-MAY 31	1.25	1.20	1.10	0.88	1.17
12.JUN 01-JUN 14	1.15	1.20	1.12	0.84	1.13
13.JUN 15-JUN 28	1.03	1.25	1.25	0.78	1.07
14.JUN 29-JUL 12	0.88	1.20	1.08	0.87	1.16
15.JUL 13-JUL 26	1.00	1.20	1.12	0.87	1.16
16.JUL 27-AUG 09	1.00	1.40	1.17	0.87	1.16
17.AUG 10-AUG 23	0.92	1.25	1.28	0.86	1.15
18.AUG 24-SEP 06	1.06	1.10	1.23	0.88	1.17
19.SEP 07-SEP 20	1.00	1.20	1.10	0.86	1.15
20.SEP 21-OCT 04	1.00	1.05	1.12	0.87	1.16
21.OCT 05-OCT 18	1.00	1.15	1.13	0.86	1.15
22.OCT 19-NOV 01	0.95	1.10	1.05	0.87	1.16
23.NOV 02-NOV 15	0.92	1.05	0.91	0.89	1.18
24.NOV 16-NOV 29	0.92	1.20	1.09	0.88	1.17
25.NOV 30-DEC 13	0.87	1.20	0.98	0.86	1.15
26.DEC 14-DEC 27	0.85	1.25	1.06	0.87	1.16
27.DEC 28-JAN 10	1.05	1.10	1.25	0.88	1.17
28.JAN 11-JAN 24	1.08	1.30	1.16	0.87	1.16
29.JAN 25-FEB 07	0.96	1.30	1.15	0.87	1.16
30.FEB 08-FEB 21	1.07	1.50	1.41	0.89	1.18
31.FEB 22-MAR 06	1.07	1.30	1.11	0.87	1.16
32.MAR 07-MAR 20	1.06	1.35	0.91	0.88	1.17
33.MAR 21-APR 03	1.05	1.20	1.01	0.88	1.17
AVERAGE TO DATE	1.05	1.23	1.15	0.87	1.16
RANGE - LOW	0.85	1.05	0.91	0.78	1.07
TO DATE - HIGH	1.30	1.50	1.41	0.89	1.18
SAMPLES ABOVE LIMITS	0				
SAMPLES BELOW LIMITS	0				
% OUTSIDE LIMITS TO DATE	0.00%				
NUMBER OF SAMPLES TO DATE	33				

FLUORIDE CONTROL DATA - 1991/92

LOCATION - HARTNEY
CHEMICAL - NaF 4%
TEST KIT - Hach Spectrophotometer
NATURAL FLUORIDE 0.2

FLUORIDATOR -LM1 A-741
OPERATOR - Mike Bobyk
TELEPHONE - 858-2429
CALCULATION - 17600

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	0.87	1.05	1.06	1.10	1.30
2.JAN 12-JAN 25	0.95	1.00	1.06	1.75	1.95
3.JAN 26-FEB 08	1.00	1.05	1.05	1.60	1.80
4.FEB 09-FEB 22	1.05	1.05	1.06	1.51	1.71
5.FEB 23-MAR 08	0.94	1.05	1.07	1.67	1.87
6.MAR 09-MAR 22	0.90	1.00	1.03	2.20	2.40
7.MAR 23-APR 05	1.20	1.05	1.05	2.44	2.64
8.APR 06-APR 19	1.00	1.05	1.06	3.00	3.20
9.APR 20-MAY 03	0.91	1.00	1.04	2.33	2.53
10.MAY 04-MAY 17	0.91	1.00	1.04	2.79	2.99
11.MAY 18-MAY 31	1.20	1.10	1.06	2.68	2.88
12.JUN 01-JUN 14	1.25	1.10	1.13	NOT AVAIL	0.00
13.JUN 15-JUN 28	1.13	1.05	1.07	1.57	1.77
14.JUN 29-JUL 12	1.07	1.05	1.08	1.12	1.32
15.JUL 13-JUL 26	1.09	1.05	1.07	1.99	2.19
16.JUL 27-AUG 09	1.00	1.00	1.01	2.32	2.52
17.AUG 10-AUG 23	1.06	1.05	1.06	2.78	2.98
18.AUG 24-SEP 06	1.03	1.00	1.13	2.60	2.80
19.SEP 07-SEP 20	1.20	1.15	1.12	1.63	1.83
20.SEP 21-OCT 04	1.07	1.10	1.09	1.53	1.73
21.OCT 05-OCT 18	0.97	1.00	1.04	1.09	1.29
22.OCT 19-NOV 01	0.92	1.05	1.05	1.16	1.36
23.NOV 02-NOV 15	1.00	1.05	1.04	1.69	1.89
24.NOV 16-NOV 29	1.03	1.05	1.06	2.32	2.52
25.NOV 30-DEC 13	1.00	1.05	1.08	2.76	2.96
26.DEC 14-DEC 27	1.05	1.08	1.08	1.69	1.89
27.DEC 28-JAN 10	1.09	1.10	1.10	1.98	2.18
28.JAN 11-JAN 24	1.11	1.10	1.07	1.15	1.35
29.JAN 25-FEB 07	1.10	1.05	1.05	1.19	1.39
30.FEB 08-FEB 21	1.06	1.05	1.05	1.70	1.90
31.FEB 22-MAR 06	1.09	1.05	1.06	1.74	1.94
32.MAR 07-MAR 20	0.94	1.05	1.05	1.79	1.99
33.MAR 21-APR 03	1.00	1.05	1.04	1.83	2.03
AVERAGE TO DATE	1.04	1.05	1.06	1.90	2.10
RANGE - LOW	0.87	1.00	1.01	1.09	1.29
TO DATE - HIGH	1.25	1.15	1.13	3.00	3.20
SAMPLES ABOVE LIMITS	0				
SAMPLES BELOW LIMITS	0				
% OUTSIDE LIMITS TO DATE	0.00%				
NUMBER OF SAMPLES TO DATE	33				

FLUORIDE CONTROL DATA - 1991/92

LOCATION - KILLARNEY
CHEMICAL - NaF 4%
TEST KIT - Hach Spectophotometer
NATURAL FLUORIDE 0.19

FLUORIDATOR - W&T
OPERATOR - Carl Parker
TELEPHONE - 523-8944
CALCULATION - 17600

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	NOT AVAIL	1.30	1.03	1.45	1.64
2.JAN 12-JAN 25	1.06	1.00	1.10	1.28	1.47
3.JAN 26-FEB 08	1.19	1.00	1.18	1.04	1.23
4.FEB 09-FEB 22	1.16	1.20	1.15	1.27	1.46
5.FEB 23-MAR 08	1.17	1.00	1.08	0.82	1.01
6.MAR 09-MAR 22	0.78	0.95	0.95	1.09	1.28
7.MAR 23-APR 05	1.12	1.00	1.07	1.26	1.45
8.APR 06-APR 19	1.03	1.15	1.11	1.13	1.32
9.APR 20-MAY 03	0.90	1.10	1.04	1.28	1.47
10.MAY 04-MAY 17	0.94	1.30	1.11	1.32	1.51
11.MAY 18-MAY 31	1.00	1.35	1.14	1.10	1.29
12.JUN 01-JUN 14	0.80	0.85	1.08	1.21	1.40
13.JUN 15-JUN 28	0.65	0.90	1.03	1.35	1.54
14.JUN 29-JUL 12	1.17	NOT AVAIL	0.00	NOT AVAIL	0.00
15.JUL 13-JUL 26	1.00	1.30	1.18	1.07	1.26
16.JUL 27-AUG 09	0.68	1.15	1.07	1.01	1.20
17.AUG 10-AUG 23	1.04	1.30	1.06	1.08	1.27
18.AUG 24-SEP 06	0.92	0.80	1.16	0.97	1.16
19.SEP 07-SEP 20	0.80	1.10	1.09	1.04	1.23
20.SEP 21-OCT 04	0.87	1.00	1.02	1.05	1.24
21.OCT 05-OCT 18	1.90	2.00	1.35	1.17	1.36
22.OCT 18-NOV 01	0.85	1.40	1.02	0.76	0.95
23.NOV 02-NOV 15	1.00	1.30	1.07	0.66	0.85
24.NOV 16-NOV 29	1.08	0.70	1.21	1.36	1.55
25.NOV 30-DEC 13	0.65	1.70	0.86	0.76	0.95
26.DEC 14-DEC 27	0.64	0.85	0.91	1.09	1.28
27.DEC 28-JAN 10	1.34	0.95	1.18	1.82	2.01
28.JAN 11-JAN 24	1.32	1.30	1.30	1.61	1.80
29.JAN 25-FEB 07	0.80	1.20	1.04	0.53	0.72
30.FEB 08-FEB 21	0.63	0.90	0.86	0.97	1.16
31.FEB 22-MAR 06	0.60	0.80	0.90	1.71	1.90
32.MAR 07-MAR 20	0.99	1.25	1.09	1.47	1.66
33.MAR 21-APR 03	1.00	1.10	1.16	1.48	1.67
AVERAGE TO DATE	0.97	1.13	1.08	1.16	1.35
RANGE - LOW	0.60	0.70	0.86	0.53	0.72
TO DATE - HIGH	1.90	2.00	1.35	1.82	2.01
SAMPLES ABOVE LIMITS	3				
SAMPLES BELOW LIMITS	7				
% OUTSIDE LIMITS TO DATE	31.25%				
NUMBER OF SAMPLES TO DATE	32				

FLUORIDE CONTROL DATA - 1991/92

LOCATION - LAC DU BONNET
CHEMICAL - NaF 4%
TEST KIT - Hach DR-100
NATURAL FLUORIDE 0.10

FLUORIDATOR - A-745
OPERATOR - Al Simcoe
TELEPHONE - 345-8766
CALCULATION - 13200

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	1.25	1.15	1.11	1.47	1.57
2.JAN 12-JAN 25	1.25	1.18	1.15	1.93	2.03
3.JAN 26-FEB 08	1.35	1.22	1.19	1.35	1.45
4.FEB 09-FEB 22	1.18	1.18	1.14	1.33	1.43
5.FEB 23-MAR 08	1.22	1.22	1.12	1.42	1.52
6.MAR 09-MAR 22	1.14	1.12	1.13	1.43	1.53
7.MAR 23-APR 05	1.26	1.22	1.09	0.70	0.80
8.APR 06-APR 19	1.10	1.21	1.09	1.21	1.31
9.APR 20-MAY 03	1.32	1.22	1.11	1.53	1.63
10.MAY 04-MAY 17	1.22	1.16	1.13	1.43	1.53
11.MAY 18-MAY 31	1.35	1.24	1.13	1.39	1.49
12.JUN 01-JUN 14	1.40	1.22	1.17	1.41	1.51
13.JUN 15-JUN 28	1.23	1.21	1.11	1.08	1.18
14.JUN 29-JUL 12	1.25	1.21	1.24	1.37	1.47
15.JUL 13-JUL 26	1.17	1.18	1.13	1.25	1.35
16.JUL 27-AUG 09	1.00	1.21	1.07	1.10	1.20
17.AUG 10-AUG 23	1.06	1.08	1.05	1.14	1.24
18.AUG 24-SEP 06	1.19	1.22	1.12	1.11	1.21
19.SEP 07-SEP 20	1.12	1.18	1.11	1.39	1.49
20.SEP 21-OCT 04	1.28	1.12	1.16	1.33	1.43
21.OCT 05-OCT 18	1.27	1.20	1.13	1.42	1.52
22.OCT 19-NOV 01	1.35	1.20	1.15	1.61	1.71
23.NOV 02-NOV 15	1.15	1.10	0.96	1.27	1.37
24.NOV 16-NOV 29	1.17	1.12	1.01	1.27	1.37
25.NOV 30-DEC 13	1.14	1.10	1.01	1.79	1.89
26.DEC 14-DEC 27	1.14	1.05	0.97	1.16	1.26
27.DEC 28-JAN 10	1.09	0.98	0.92	1.14	1.24
28.JAN 11-JAN 24	1.07	1.17	0.98	1.24	1.34
29.JAN 25-FEB 07	1.19	1.10	1.05	1.46	1.56
30.FEB 08-FEB 21	1.20	1.17	1.05	1.89	1.99
31.FEB 22-MAR 06	1.21	1.19	1.01	1.41	1.51
32.MAR 07-MAR 20	1.20	1.10	0.99	1.36	1.46
33.MAR 21-APR 03	1.18	1.09	0.98	NOT AVAIL	0.00
AVERAGE TO DATE	1.20	1.16	1.08	1.36	1.46
RANGE - LOW	1.00	0.98	0.92	0.70	0.80
TO DATE - HIGH	1.40	1.24	1.24	1.93	2.03
SAMPLES ABOVE LIMITS	5				
SAMPLES BELOW LIMITS	0				
% OUTSIDE LIMITS TO DATE	15.15%				
NUMBER OF SAMPLES TO DATE	33				

NOTE: Lac du Bonnet converted from a batch mix system to an upflow saturator system March 23, 1992.

FLUORIDE CONTROL DATA - 1991/92

LOCATION - LETELLIER
CHEMICAL - H2SiF6 - 25%
TEST KIT - Hach Spectrophotometer DR3
NATURAL FLUORIDE 0.17

FLUORIDATOR -LM1
OPERATOR - Jack Cronk
TELEPHONE - 737-2265
CALCULATION - 192000

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	1.05	1.15	1.18	1.23	1.40
2.JAN 12-JAN 25	1.05	1.16	1.17	0.84	1.01
3.JAN 26-FEB 08	1.07	1.18	1.20	0.81	0.98
4.FEB 09-FEB 22	1.05	1.13	1.20	0.77	0.94
5.FEB 23-MAR 08	0.88	1.06	1.08	0.77	0.94
6.MAR 09-MAR 22	0.95	1.02	1.08	NOT AVAIL	0.00
7.MAR 23-APR 05	0.92	1.05	1.11	0.82	0.99
8.APR 06-APR 19	0.92	1.03	1.08	0.83	1.00
9.APR 20-MAY 03	0.94	1.02	1.07	0.82	0.99
10.MAY 04-MAY 17	0.95	1.02	1.10	0.88	1.05
11.MAY 18-MAY 31	1.11	1.16	1.18	0.97	1.14
12.JUN 01-JUN 14	1.05	1.10	1.16	0.96	1.13
13.JUN 15-JUN 28	1.23	1.23	1.22	0.97	1.14
14.JUN 29-JUL 12	1.20	1.28	1.27	0.97	1.14
15.JUL 13-JUL 26	1.15	1.24	1.29	0.97	1.14
16.JUL 27-AUG 09	1.24	1.31	1.27	0.98	1.15
17.AUG 10-AUG 23	1.15	1.28	1.29	0.98	1.15
18.AUG 24-SEP 06	1.14	1.30	1.26	0.98	1.15
19.SEP 07-SEP 20	1.13	1.22	1.26	NOT AVAIL	0.00
20.SEP 21-OCT 04	1.23	1.23	1.30	0.98	1.15
21.OCT 05-OCT 18	1.15	1.07	1.19	0.89	1.06
22.OCT 19-NOV 01	1.05	1.01	1.08	0.84	1.01
23.NOV 02-NOV 15	1.05	1.07	1.07	0.85	1.02
24.NOV 16-NOV 29	1.08	1.07	1.09	0.83	1.00
25.NOV 30-DEC 13	1.05	1.11	1.10	0.84	1.01
26.DEC 14-DEC 27	1.10	1.12	1.11	0.84	1.01
27.DEC 28-JAN 10	1.06	1.17	1.17	0.84	1.01
28.JAN 11-JAN 24	1.07	1.07	1.11	0.86	1.03
29.JAN 25-FEB 07	1.12	1.09	1.11	0.79	0.96
30.FEB 08-FEB 21	1.10	1.20	1.14	0.92	1.09
31.FEB 22-MAR 06	1.17	1.08	1.14	0.85	1.02
32.MAR 07-MAR 20	1.09	1.12	1.17	0.85	1.02
33.MAR 21-APR 03	1.05	1.12	1.10	0.86	1.03
AVERAGE TO DATE	1.08	1.14	1.16	0.89	1.06
RANGE - LOW	0.88	1.01	1.07	0.77	0.94
TO DATE - HIGH	1.24	1.31	1.30	1.23	1.40
SAMPLES ABOVE LIMITS	0				
SAMPLES BELOW LIMITS	0				
% OUTSIDE LIMITS TO DATE	0.00%				
NUMBER OF SAMPLES TO DATE	33				

FLUORIDE CONTROL DATA - 1991/92

LOCATION - MANITOU
CHEMICAL - NaF 3%
TEST KIT - Hach DR-100
NATURAL FLUORIDE 0.19

FLUORIDATOR -W&T A-745
OPERATOR - Percy N. Lea
TELEPHONE - 242-2885
CALCULATION - 13200

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	1.12	1.16	1.17	0.84	1.03
2.JAN 12-JAN 25	1.12	1.16	1.16	0.94	1.13
3.JAN 26-FEB 08	1.11	1 10	1.15	0.89	1.08
4.FEB 09-FEB 22	1.17	1.29	1.20	1.03	1.22
5.FEB 23-MAR 08	1.17	1.29	1.26	1.00	1.19
6.MAR 09-MAR 22	1.34	1.30	1.23	0.86	1.05
7.MAR 23-APR 05	1.12	1.14	1.19	0.94	1.13
8.APR 06-APR 19	1.10	1.15	1.17	1.15	1.34
9.APR 20-MAY 03	1.08	1.14	1.13	1.07	1.26
10.MAY 04-MAY 17	1.16	1.20	1.20	1.09	1.28
11.MAY 18-MAY 31	1.15	1.19	1.19	1.02	1.21
12.JUN 01-JUN 14	1.15	1.20	1.20	1.19	1.38
13.JUN 15-JUN 28	1.19	1.15	1.22	1.12	1.31
14.JUN 29-JUL 12	1.32	1.28	1.27	1.07	1.26
15.JUL 13-JUL 26	1.11	1.23	1.20	0.87	1.06
16.JUL 27-AUG 09	1.10	1.23	1.24	0.91	1.10
17.AUG 10-AUG 23	1.20	1.22	1.25	0.91	1.10
18.AUG 24-SEP 06	1.08	1.20	1.21	0.92	1.11
19.SEP 07-SEP 20	1.10	1.18	1.23	0.98	1.17
20.SEP 21-OCT 04	1.15	1.20	1.23	1.00	1.19
21.OCT 05-OCT 18	1.09	1.19	1.20	0.81	1.00
22.OCT 19-NOV 01	1.05	1.15	1.17	0.86	1.05
23.NOV 02-NOV 15	1.10	1.10	1.13	0.89	1.08
24.NOV 16-NOV 29	1.07	1.08	1.09	0.82	1.01
25.NOV 30-DEC 13	1.14	1.13	1.17	1.00	1.19
26.DEC 14-DEC 27	1.05	1.05	1.07	0.82	1.01
27.DEC 28-JAN 10	1.09	1.05	1.09	0.92	1.11
28.JAN 11-JAN 24	1.18	1.13	1.14	0.97	1.16
29.JAN 25-FEB 07	1.26	1.14	1.15	0.94	1.13
30.FEB 08-FEB 21	1.20	1.12	1.16	0.97	1.16
31.FEB 22-MAR 06	1.12	1.06	1.10	1.06	1.25
32.MAR 07-MAR 20	1.25	1.10	1.19	0.96	1.15
33.MAR 21-APR 03	1.05	1.05	1.08	0.94	1.13
AVERAGE TO DATE	1.14	1.16	1.18	0.96	1.15
RANGE - LOW	1.05	1.05	1.07	0.81	1.00
TO DATE - HIGH	1.34	1.30	1.27	1.19	1.38
SAMPLES ABOVE LIMITS	2				
SAMPLES BELOW LIMITS	0				
% OUTSIDE LIMITS TO DATE	6.06%				
NUMBER OF SAMPLES TO DATE	33				

FLUORIDE CONTROL DATA - 1991/92

LOCATION - McCREARY
CHEMICAL - NaF 3%
TEST KIT - Hach DR-100
NATURAL FLUORIDE 0.24

FLUORIDATOR -W&T A-588
OPERATOR - Ivan Harper
TELEPHONE - 835-2341
CALCULATION - 13200

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	1.05	0.97	1.07	0.84	1.08
2.JAN 12-JAN 25	1.05	1.12	1.13	0.83	1.07
3.JAN 26-FEB 08	1.03	1.23	1.11	0.83	1.07
4.FEB 09-FEB 22	1.00	0.93	1.13	0.75	0.99
5.FEB 23-MAR 08	1.00	0.95	1.09	0.75	0.99
6.MAR 09-MAR 22	1.04	0.95	1.14	0.90	1.14
7.MAR 23-APR 05	1.04	1.16	1.08	0.89	1.13
8.APR 06-APR 19	0.96	1.18	1.07	0.84	1.08
9.APR 20-MAY 03	0.91	0.94	1.09	0.84	1.08
10.MAY 04-MAY 17	0.91	1.10	1.08	0.92	1.16
11.MAY 18-MAY 31	1.00	1.15	1.11	0.90	1.14
12.JUN 01-JUN 14	0.97	0.96	1.05	0.92	1.16
13.JUN 15-JUN 28	1.00	1.07	1.14	0.89	1.13
14.JUN 29-JUL 12	1.05	1.16	1.14	0.99	1.23
15.JUL 13-JUL 26	0.99	0.97	1.10	0.94	1.18
16.JUL 27-AUG 09	1.04	0.90	1.05	0.90	1.14
17.AUG 10-AUG 23	1.10	0.95	0.96	0.96	1.20
18.AUG 24-SEP 06	1.09	0.95	1.04	0.97	1.21
19.SEP 07-SEP 20	1.05	1.08	1.14	0.99	1.23
20.SEP 21-OCT 04	1.07	0.95	1.11	1.05	1.29
21.OCT 05-OCT 18	1.13	1.12	1.02	1.00	1.24
22.OCT 19-NOV 01	1.10	1.16	1.13	1.03	1.27
23.NOV 02-NOV 15	1.05	1.06	1.05	1.02	1.26
24.NOV 16-NOV 29	1.00	1.01	1.02	0.99	1.23
25.NOV 30-DEC 13	1.00	0.99	0.98	0.96	1.20
26.DEC 14-DEC 27	1.10	1.14	0.99	0.98	1.22
27.DEC 28-JAN 10	1.00	1.13	1.15	1.06	1.30
28.JAN 11-JAN 24	1.02	1.06	1.09	0.96	1.20
29.JAN 25-FEB 07	1.20	1.00	0.97	0.91	1.15
30.FEB 08-FEB 21	1.10	1.05	1.05	0.94	1.18
31.FEB 22-MAR 06	1.12	1.07	1.11	0.98	1.22
32.MAR 07-MAR 20	0.96	1.00	1.02	0.97	1.21
33.MAR 21-APR 03	1.04	1.16	1.10	1.00	1.24
AVERAGE TO DATE	1.04	1.05	1.08	0.93	1.17
RANGE - LOW	0.91	0.90	0.96	0.75	0.99
TO DATE - HIGH	1.20	1.23	1.15	1.06	1.30

SAMPLES ABOVE LIMITS	0
SAMPLES BELOW LIMITS	0
% OUTSIDE LIMITS TO DATE	0.00%
NUMBER OF SAMPLES TO DATE	33

FLUORIDE CONTROL DATA - 1991/92

LOCATION - MELITA
CHEMICAL - NaF 4%
TEST KIT - Hach DR-3
NATURAL FLUORIDE 0.18

FLUORIDATOR -W&T Saturator
OPERATOR - E. Pederson
TELEPHONE - 522-3413
CALCULATION - 17600

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	1.20	1.10	1.20	1.38	1.56
2.JAN 12-JAN 25	1.12	1.20	1.22	1.30	1.48
3.JAN 26-FEB 08	1.12	1.15	1.18	1.17	1.35
4.FEB 09-FEB 22	1.00	1.10	1.14	1.25	1.43
5.FEB 23-MAR 08	1.15	1.32	1.21	1.76	1.94
6.MAR 09-MAR 22	1.00	1.15	1.22	1.32	1.50
7.MAR 23-APR 05	1.07	1.10	1.15	1.20	1.38
8.APR 06-APR 19	1.03	1.10	1.15	1.34	1.52
9.APR 20-MAY 03	1.05	1.13	1.18	1.60	1.78
10.MAY 04-MAY 17	1.13	1.15	1.24	1.28	1.46
11.MAY 18-MAY 31	1.06	1.15	1.24	1.31	1.49
12.JUN 01-JUN 14	1.05	1.30	1.22	1.26	1.44
13.JUN 15-JUN 28	1.00	1.25	1.25	1.24	1.42
14.JUN 29-JUL 12	0.88	1.15	1.27	0.14	0.32
15.JUL 13-JUL 26	0.80	1.30	1.26	0.78	0.96
16.JUL 27-AUG 09	0.91	2.00	1.23	1.00	1.18
17.AUG 10-AUG 23	0.91	2.00	1.25	0.95	1.13
18.AUG 24-SEP 06	0.89	1.12	1.22	0.89	1.07
19.SEP 07-SEP 20	0.84	1.13	1.18	0.96	1.14
20.SEP 21-OCT 04	0.86	1.21	1.22	1.15	1.33
21.OCT 05-OCT 18	0.92	1.05	1.06	1.04	1.22
22.OCT 19-NOV 01	0.92	1.10	1.07	1.03	1.21
23.NOV 02-NOV 15	1.04	1.10	1.09	1.05	1.23
24.NOV 16-NOV 29	0.92	1.00	1.06	1.08	1.26
25.NOV 30-DEC 13	0.94	1.10	1.09	0.13	0.31
26.DEC 14-DEC 27	0.96	1.02	1.08	1.08	1.26
27.DEC 28-JAN 10	1.12	1.10	1.15	1.15	1.33
28.JAN 11-JAN 24	1.14	1.12	1.15	1.19	1.37
29.JAN 25-FEB 07	1.04	1.05	1.12	1.16	1.34
30.FEB 08-FEB 21	0.89	0.95	1.10	1.15	1.33
31.FEB 22-MAR 06	0.87	0.92	0.94	1.33	1.51
32.MAR 07-MAR 20	0.93	1.00	1.14	1.22	1.40
33.MAR 21-APR 03	0.95	1.10	1.14	1.02	1.20
AVERAGE TO DATE	0.99	1.21	1.18	1.10	1.28
RANGE - LOW	0.80	1.00	1.06	0.13	0.31
TO DATE - HIGH	1.20	2.00	1.27	1.76	1.94

SAMPLES ABOVE LIMITS	0
SAMPLES BELOW LIMITS	0
% OUTSIDE LIMITS TO DATE	0.00%
NUMBER OF SAMPLES TO DATE	33

FLUORIDE CONTROL DATA - 1991/92

LOCATION - MINNEDOSA
CHEMICAL - NaF 4%
TEST KIT - Hach Filterphotometer
NATURAL FLUORIDE 0.28

FLUORIDATOR -W&T A-417
OPERATOR - Taylor/McVey
TELEPHONE - 867-2949
CALCULATION - 17600

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	NOT AVAIL	1.20	1.13	0.25	0.53
2.JAN 12-JAN 25	1.05	1.10	1.14	0.42	0.70
3.JAN 26-FEB 08	1.21	1.15	1.11	0.83	1.11
4.FEB 09-FEB 22	0.94	1.10	1.14	1.28	1.56
5.FEB 23-MAR 08	1.40	1.20	1.13	0.82	1.10
6.MAR 09-MAR 22	1.04	1.25	1.14	0.47	0.75
7.MAR 23-APR 05	0.98	1.05	1.17	0.87	1.15
8.APR 06-APR 19	1.00	1.00	1.05	0.77	1.05
9.APR 20-MAY 03	1.05	1.00	1.04	0.69	0.97
10.MAY 04-MAY 17	1.28	1.15	1.16	0.90	1.18
11.MAY 18-MAY 31	1.25	1.30	1.15	1.06	1.34
12.JUN 01-JUN 14	1.05	1.10	1.11	0.96	1.24
13.JUN 15-JUN 28	1.90	1.20	1.18	0.96	1.24
14.JUN 29-JUL 12	0.91	1.01	1.15	0.45	0.73
15.JUL 13-JUL 26	0.87	1.20	1.20	0.74	1.02
16.JUL 27-AUG 09	1.00	1.15	1.16	0.75	1.03
17.AUG 10-AUG 23	1.50	1.10	1.00	0.77	1.05
18.AUG 24-SEP 06	0.77	1.15	1.11	0.71	0.99
19.SEP 07-SEP 20	0.86	1.10	1.12	0.77	1.05
20.SEP 21-OCT 04	0.90	1.20	1.14	0.65	0.93
21.OCT 05-OCT 18	0.48	1.00	0.85	0.36	0.64
22.OCT 19-NOV 01	0.53	1.00	0.90	0.65	0.93
23.NOV 02-NOV 15	0.66	1.05	1.08	0.27	0.55
24.NOV 16-NOV 29	1.07	1.20	1.19	0.51	0.79
25.NOV 30-DEC 13	1.12	1.30	1.16	0.67	0.95
26.DEC 14-DEC 27	1.05	1.20	1.20	0.67	0.95
27.DEC 28-JAN 10	1.05	1.15	1.15	0.66	0.94
28.JAN 11-JAN 24	1.00	1.10	1.10	0.57	0.85
29.JAN 25-FEB 07	0.91	1.20	1.19	0.71	0.99
30.FEB 08-FEB 21	0.91	1.20	1.14	0.57	0.85
31.FEB 22-MAR 06	0.74	1.00	1.09	0.74	1.02
32.MAR 07-MAR 20	1.92	1.10	1.09	0.71	0.99
33.MAR 21-APR 03	1.06	1.00	1.03	0.78	1.06
AVERAGE TO DATE	1.05	1.13	1.11	0.70	0.98
RANGE - LOW	0.48	1.00	0.85	0.25	0.53
TO DATE - HIGH	1.92	1.30	1.20	1.28	1.56
SAMPLES ABOVE LIMITS	4				
SAMPLES BELOW LIMITS	5				
% OUTSIDE LIMITS TO DATE	28.13%				
NUMBER OF SAMPLES TO DATE	32				

NOTE: Fluctuations in readings were related to minor equipment problems. Levels have stabilized in the early part of 1992/93 (not shown above).

FLUORIDE CONTROL DATA - 1991/92

LOCATION - MORDEN
CHEMICAL - NaF 4%
TEST KIT - Hach DR-100
NATURAL FLUORIDE 0.32

FLUORIDATOR -LMI B-731
OPERATOR - Les Wieler
TELEPHONE - 822-5707
CALCULATION - 17600

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	1.15	1.20	1.18	1.04	1.36
2.JAN 12-JAN 25	1.18	1.20	1.19	0.91	1.23
3.JAN 26-FEB 08	1.22	1.25	1.24	0.95	1.27
4.FEB 09-FEB 22	1.18	1.15	1.20	0.93	1.25
5.FEB 23-MAR 08	1.12	1.10	1.11	0.92	1.24
6.MAR 09-MAR 22	1.07	1.10	1.16	1.02	1.34
7.MAR 23-APR 05	1.15	1.20	1.18	0.94	1.26
8.APR 06-APR 19	1.05	1.05	1.07	0.93	1.25
9.APR 20-MAY 03	0.98	1.10	1.05	0.93	1.25
10.MAY 04-MAY 17	1.04	1.10	1.11	0.91	1.23
11.MAY 18-MAY 31	1.00	1.20	1.17	0.89	1.21
12.JUN 01-JUN 14	1.00	1.25	1.24	0.88	1.20
13.JUN 15-JUN 28	0.96	1.25	1.20	0.79	1.11
14.JUN 29-JUL 12	0.95	1.05	1.03	0.85	1.17
15.JUL 13-JUL 26	0.95	1.05	1.06	0.86	1.18
16.JUL 27-AUG 09	1.07	1.10	1.08	0.85	1.17
17.AUG 10-AUG 23	1.04	1.10	1.09	0.87	1.19
18.AUG 24-SEP 06	1.03	1.05	1.09	0.85	1.17
19.SEP 07-SEP 20	1.03	1.05	1.07	0.88	1.20
20.SEP 21-OCT 04	1.10	1.10	1.19	0.90	1.22
21.OCT 05-OCT 18	1.05	1.05	1.10	0.89	1.21
22.OCT 19-NOV 01	1.00	1.00	1.05	0.85	1.17
23.NOV 02-NOV 15	0.97	1.00	1.03	0.77	1.09
24.NOV 16-NOV 29	0.97	1.00	1.05	0.75	1.07
25.NOV 30-DEC 13	0.95	1.05	1.05	0.77	1.09
26.DEC 14-DEC 27	0.92	1.00	1.06	0.86	1.18
27.DEC 28-JAN 10	0.90	0.95	0.99	0.70	1.02
28.JAN 11-JAN 24	0.87	1.00	0.99	0.72	1.04
29.JAN 25-FEB 07	0.92	0.95	0.98	0.72	1.04
30.FEB 08-FEB 21	0.99	1.00	1.01	NOT AVAIL	0.00
31.FEB 22-MAR 06	1.00	1.05	1.06	0.76	1.08
32.MAR 07-MAR 20	0.93	1.00	1.01	0.74	1.06
33.MAR 21-APR 03	0.93	1.00	1.02	0.71	1.03
AVERAGE TO DATE	1.02	1.08	1.09	0.85	1.17
RANGE - LOW	0.87	0.95	0.98	0.70	1.02
TO DATE - HIGH	1.22	1.25	1.24	1.04	1.36
SAMPLES ABOVE LIMITS	0				
SAMPLES BELOW LIMITS	0				
% OUTSIDE LIMITS TO DATE	0.00%				
NUMBER OF SAMPLES TO DATE	33				

FLUORIDE CONTROL DATA - 1991/92

LOCATION - MORRIS
CHEMICAL - NaF 4%
TEST KIT - HACH DR-100
NATURAL FLUORIDE 0.22

FLUORIDATOR -LM1
OPERATOR - S. Johnston
TELEPHONE - 746-2531
CALCULATION - 17600

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	0.90	1.00	1.03	0.65	0.87
2.JAN 12-JAN 25	0.85	1.00	1.00	0.52	0.74
3.JAN 26-FEB 08	0.75	1.00	1.00	2.13	2.35
4.FEB 09-FEB 22	0.80	0.95	0.99	0.95	1.17
5.FEB 23-MAR 08	0.88	1.00	0.99	0.56	0.78
6.MAR 09-MAR 22	0.96	1.00	0.98	1.29	1.51
7.MAR 23-APR 05	1.05	1.01	1.01	0.74	0.96
8.APR 06-APR 19	1.10	1.00	1.02	0.97	1.19
9.APR 20-MAY 03	1.12	1.15	1.09	0.89	1.11
10.MAY 04-MAY 17	1.11	1.00	1.00	0.90	1.12
11.MAY 18-MAY 31	1.15	1.00	1.00	0.60	0.82
12.JUN 01-JUN 14	1.00	1.10	1.03	0.64	0.86
13.JUN 15-JUN 28	0.95	1.00	1.01	0.74	0.96
14.JUN 29-JUL 12	0.80	1.00	1.00	0.12	0.34
15.JUL 13-JUL 26	0.76	0.90	1.00	1.02	1.24
16.JUL 27-AUG 09	0.33	1.00	1.00	0.23	0.45
17.AUG 10-AUG 23	0.48	1.00	1.00	0.20	0.42
18.AUG 24-SEP 06	0.35	0.07	0.22	0.14	0.36
19.SEP 07-SEP 20	0.50	0.30	0.34	0.24	0.46
20.SEP 21-OCT 04	0.67	0.90	0.85	0.75	0.97
21.OCT 05-OCT 18	0.64	0.90	0.90	0.90	1.12
22.OCT 19-NOV 01	0.73	0.90	0.94	0.61	0.83
23.NOV 02-NOV 15	0.77	0.90	0.90	0.66	0.88
24.NOV 16-NOV 29	0.80	0.90	0.90	0.89	1.11
25.NOV 30-DEC 13	0.83	0.90	0.90	NOT AVAIL	0.00
26.DEC 14-DEC 27	0.92	0.90	0.90	0.79	1.01
27.DEC 28-JAN 10	1.00	0.90	0.90	0.68	0.90
28.JAN 11-JAN 24	1.18	1.00	0.93	NOT AVAIL	0.00
29.JAN 25-FEB 07	0.95	0.90	1.00	1.07	1.29
30.FEB 08-FEB 21	0.65	1.00	0.88	0.97	1.19
31.FEB 22-MAR 06	0.83	1.00	0.91	0.97	1.19
32.MAR 07-MAR 20	0.94	1.00	1.00	1.22	1.44
33.MAR 21-APR 03	0.88	0.90	0.97	1.07	1.29
AVERAGE TO DATE	0.84	0.92	0.93	0.78	1.00
RANGE - LOW	0.33	0.07	0.22	0.12	0.34
TO DATE - HIGH	1.18	1.15	1.09	2.13	2.35
SAMPLES ABOVE LIMITS	0				
SAMPLES BELOW LIMITS	11				
% OUTSIDE LIMITS TO DATE	33.33%				
NUMBER OF SAMPLES TO DATE	33				

NOTE: Improper equipment maintenance contributed to equipment failure and resulted in low readings.

FLUORIDE CONTROL DATA - 1991/92

LOCATION - NEEPAWA
CHEMICAL - Na2SiF6 (Dry)
TEST KIT - Hach DR-2
NATURAL FLUORIDE 0.24

FLUORIDATOR -W&T A-690
OPERATOR - G. Squires
TELEPHONE - 476-5331
CALCULATION - 60000

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	1.13	1.20	1.22	1.02	1.26
2.JAN 12-JAN 25	1.22	1.24	1.24	1.03	1.32
3.JAN 26-FEB 08	1.15	1.20	1.21	1.06	1.76
4.FEB 09-FEB 22	1.17	1.20	1.22	0.96	1.27
5.FEB 23-MAR 08	1.10	1.20	1.24	0.96	1.28
6.MAR 09-MAR 22	1.00	1.20	1.21	0.91	1.15
7.MAR 23-APR 05	1.07	1.20	1.22	0.95	1.21
8.APR 06-APR 19	0.96	NOT AVAIL	0.00	NOT AVAIL	0.00
9.APR 20-MAY 03	1.00	1.18	1.19	0.25	0.45
10.MAY 04-MAY 17	1.13	1.14	1.16	1.00	1.20
11.MAY 18-MAY 31	1.20	1.20	1.18	1.27	1.46
12.JUN 01-JUN 14	1.20	1.20	1.19	1.25	1.45
13.JUN 15-JUN 28	1.25	1.25	1.21	1.22	1.44
14.JUN 29-JUL 12	1.18	1.20	1.24	1.15	1.36
15.JUL 13-JUL 26	1.28	1.20	1.24	1.37	1.56
16.JUL 27-AUG 09	1.19	1.20	1.29	1.24	1.47
17.AUG 10-AUG 23	1.26	1.20	1.27	1.34	1.54
18.AUG 24-SEP 06	1.22	1.17	1.18	1.14	1.36
19.SEP 07-SEP 20	1.12	1.20	1.17	1.15	1.36
20.SEP 21-OCT 04	1.30	1.20	1.20	1.10	1.30
21.OCT 05-OCT 18	1.33	1.24	1.24	1.30	1.52
22.OCT 21-NOV 01	1.30	1.25	1.26	1.27	1.47
23.NOV 02-NOV 15	1.07	1.10	1.16	0.97	1.19
24.NOV 16-NOV 29	1.15	1.00	1.05	1.17	1.43
25.NOV 30-DEC 13	1.09	1.00	1.00	1.04	1.26
26.DEC 14-DEC 27	1.05	1.00	1.01	1.00	1.25
27.DEC 28-JAN 10	1.09	1.00	1.02	0.98	1.30
28.JAN 11-JAN 24	0.92	0.90	0.95	0.83	1.07
29.JAN 25-FEB 07	1.11	1.00	1.00	0.95	1.21
30.FEB 08-FEB 21	0.95	1.03	1.03	0.80	1.05
31.FEB 22-MAR 06	0.90	1.00	0.99	0.76	1.01
32.MAR 07-MAR 20	1.00	1.00	1.04	0.82	1.05
33.MAR 21-APR 03	1.04	1.00	0.99	0.82	1.07
AVERAGE TO DATE	1.13	1.13	1.15	1.03	1.28
RANGE - LOW	0.90	0.90	0.95	0.25	0.45
TO DATE - HIGH	1.33	1.25	1.29	1.37	1.76
SAMPLES ABOVE LIMITS	1				
SAMPLES BELOW LIMITS	0				
% OUTSIDE LIMITS TO DATE	3.03%				
NUMBER OF SAMPLES TO DATE	33				

FLUORIDE CONTROL DATA - 1991/92

LOCATION - PILOT MOUND
CHEMICAL - NaF 3%
TEST KIT - Hach DR-100
NATURAL FLUORIDE 0.21

FLUORIDATOR -W&T A-588
OPERATOR Gary Odlum
TELEPHONE - 825-2115
CALCULATION - 12000

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	1.05	1.12	1.16	0.74	0.95
2.JAN 12-JAN 25	1.00	1.08	1.10	0.70	0.91
3.JAN 26-FEB 08	0.94	1.04	1.07	0.72	0.93
4.FEB 09-FEB 22	0.98	1.06	1.08	0.73	0.94
5.FEB 23-MAR 08	0.92	1.07	1.07	0.75	0.96
6.MAR 09-MAR 22	0.96	1.08	1.12	0.75	0.98
7.MAR 23-APR 05	0.92	1.04	1.10	0.81	1.02
8.APR 06-APR 19	1.00	1.08	1.09	0.81	1.02
9.APR 20-MAY 03	1.00	1.04	1.08	0.88	1.09
10.MAY 04-MAY 17	1.00	1.09	1.11	0.88	1.09
11.MAY 18-MAY 31	1.05	1.14	1.13	0.90	1.11
12.JUN 01-JUN 14	1.00	1.10	1.15	0.84	1.05
13.JUN 15-JUN 28	1.03	1.11	1.17	0.88	1.09
14.JUN 29-JUL 12	1.10	1.16	1.19	0.88	1.09
15.JUL 13-JUL 26	1.00	1.15	1.18	0.90	1.11
16.JUL 27-AUG 09	1.05	1.10	1.16	0.90	1.11
17.AUG 10-AUG 23	1.05	1.17	1.20	0.88	1.09
18.AUG 24-SEP 06	1.08	1.23	1.22	0.79	1.00
19.SEP 07-SEP 20	1.00	1.16	1.19	0.75	0.96
20.SEP 21-OCT 04	1.12	1.12	1.17	0.78	0.99
21.OCT 05-OCT 18	1.17	1.24	1.22	0.80	1.01
22.OCT 19-NOV 01	1.00	1.09	1.12	0.75	0.96
23.NOV 02-NOV 15	1.10	1.12	1.18	0.75	0.96
24.NOV 16-NOV 29	1.11	1.13	1.16	0.75	0.96
25.NOV 30-DEC 13	1.00	1.10	1.09	0.75	0.96
26.DEC 14-DEC 27	1.05	1.09	1.12	0.78	0.99
27.DEC 28-JAN 10	1.17	1.16	1.19	0.74	0.95
28.JAN 11-JAN 24	1.07	1.14	1.18	0.78	0.99
29.JAN 25-FEB 07	1.19	1.23	1.22	0.78	0.99
30.FEB 08-FEB 21	1.10	1.17	1.20	0.75	0.96
31.FEB 22-MAR 06	1.07	1.18	1.19	0.73	0.94
32.MAR 07-MAR 20	1.14	1.19	1.20	0.75	0.96
33.MAR 21-APR 03	1.05	1.20	1.20	0.69	0.90
AVERAGE TO DATE	1.04	1.13	1.15	0.79	1.00
RANGE - LOW	0.92	1.04	1.07	0.69	0.90
TO DATE - HIGH	1.19	1.24	1.22	0.90	1.11
SAMPLES ABOVE LIMITS	0				
SAMPLES BELOW LIMITS	0				
% OUTSIDE LIMITS TO DATE	0.00%				
NUMBER OF SAMPLES TO DATE	33				

FLUORIDE CONTROL DATA - 1991/92

LOCATION - PINAWA
CHEMICAL - NaF2SiF6
TEST KIT - Hach Spectrophotometer
NATURAL FLUORIDE 0.08

FLUORIDATOR -W&T A-690
OPERATOR - Ron McDowall
TELEPHONE - 753-2542
CALCULATION - 60000

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	1.15	1.05	1.06	0.79	0.87
2.JAN 12-JAN 25	1.27	1.18	1.19	0.87	0.95
3.JAN 26-FEB 08	1.20	1.07	1.14	0.76	0.84
4.FEB 09-FEB 22	1.12	1.05	1.05	0.80	0.88
5.FEB 23-MAR 08	1.18	0.95	0.94	0.70	0.78
6.MAR 09-MAR 22	1.14	1.02	1.03	0.75	0.83
7.MAR 23-APR 05	1.29	1.15	1.15	0.91	0.99
8.APR 06-APR 19	1.18	1.10	1.03	0.63	0.71
9.APR 20-MAY 03	1.27	1.12	1.05	0.69	0.77
10.MAY 04-MAY 17	1.29	0.98	1.00	0.64	0.72
11.MAY 18-MAY 31	1.15	1.07	1.07	0.67	0.75
12.JUN 01-JUN 14	1.15	1.08	1.07	0.76	0.84
13.JUN 15-JUN 28	1.12	1.04	1.08	0.69	0.77
14.JUN 29-JUL 12	1.25	1.10	1.12	0.78	0.86
15.JUL 13-JUL 26	1.12	1.10	1.08	0.69	0.77
16.JUL 27-AUG 09	1.10	0.92	0.93	0.52	0.60
17.AUG 10-AUG 23	1.15	1.00	1.01	0.47	0.55
18.AUG 24-SEP 06	1.09	0.95	1.00	0.58	0.66
19.SEP 07-SEP 20	1.12	1.02	1.03	0.63	0.71
20.SEP 21-OCT 04	1.24	1.12	1.13	0.78	0.86
21.OCT 05-OCT 18	1.17	1.06	1.05	0.74	0.82
22.OCT 19-NOV 01	0.93	0.96	0.99	0.70	0.78
23.NOV 02-NOV 15	1.20	1.03	1.03	0.70	0.78
24.NOV 16-NOV 29	1.14	0.94	0.95	0.74	0.82
25.NOV 30-DEC 13	1.07	1.05	1.05	0.66	0.74
26.DEC 14-DEC 27	1.10	1.10	1.21	0.59	0.67
27.DEC 28-JAN 10	1.00	0.90	0.91	0.60	0.68
28.JAN 11-JAN 24	1.24	1.00	1.00	0.80	0.88
29.JAN 25-FEB 07	1.11	1.00	1.00	0.68	0.76
30.FEB 08-FEB 21	1.06	0.95	1.17	0.63	0.71
31.FEB 22-MAR 06	1.02	1.03	0.98	0.66	0.74
32.MAR 07-MAR 20	0.93	1.10	1.02	0.57	0.65
33.MAR 21-APR 03	1.05	0.90	0.93	0.74	0.82
AVERAGE TO DATE	1.16	1.05	1.05	0.70	0.78
RANGE - LOW	0.93	0.92	0.93	0.47	0.55
TO DATE - HIGH	1.29	1.18	1.21	0.91	0.99
SAMPLES ABOVE LIMITS	0				
SAMPLES BELOW LIMITS	0				
% OUTSIDE LIMITS TO DATE	0.00%				
NUMBER OF SAMPLES TO DATE	33				

FLUORIDE CONTROL DATA - 1991/92

LOCATION - PORTAGE LA PRAIRIE
CHEMICAL - Na2SiF6 (Dry)
TEST KIT - Specific Ion Electrode
NATURAL FLUORIDE 0.20

FLUORIDATOR -W&T A-690
OPERATOR - Dave Pirt
TELEPHONE - 857-9781
CALCULATION - 60000

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	1.32	1.28	1.22	0.96	1.16
2.JAN 12-JAN 25	1.20	1.24	1.22	0.86	1.06
3.JAN 26-FEB 08	1.15	1.21	1.19	0.80	1.00
4.FEB 09-FEB 22	1.27	1.24	1.19	0.80	1.00
5.FEB 23-MAR 08	1.25	1.20	1.22	0.80	1.00
6.MAR 09-MAR 22	1.17	1.14	1.21	0.89	1.09
7.MAR 23-APR 05	1.20	1.26	1.21	NOT AVAIL	0.00
8.APR 06-APR 19	1.14	1.06	1.24	0.76	0.96
9.APR 20-MAY 03	1.10	1.20	1.22	0.78	0.98
10.MAY 04-MAY 17	1.13	1.21	1.21	0.83	1.03
11.MAY 18-MAY 31	1.12	1.10	1.14	0.85	1.05
12.JUN 01-JUN 14	1.15	1.23	1.18	0.87	1.07
13.JUN 15-JUN 28	1.23	1.18	1.20	0.93	1.13
14.JUN 29-JUL 12	1.17	1.13	1.21	0.83	1.03
15.JUL 15-JUL 26	1.28	1.18	1.22	1.02	1.22
16.JUL 27-AUG 09	1.36	1.24	1.15	1.79	1.99
17.AUG 10-AUG 23	1.34	1.21	1.18	1.09	1.29
18.AUG 24-SEP 06	1.43	1.33	1.21	1.09	1.29
19.SEP 07-SEP 20	1.30	1.16	1.07	0.96	1.16
20.SEP 21-OCT 04	1.36	1.10	1.20	1.08	1.28
21.OCT 05-OCT 18	1.44	1.23	1.21	1.01	1.21
22.OCT 19-NOV 01	1.40	1.09	1.21	0.94	1.14
23.NOV 02-NOV 15	1.23	1.21	1.21	0.91	1.11
24.NOV 16-NOV 29	1.07	1.16	1.08	1.02	1.22
25.NOV 30-DEC 13	1.18	1.19	1.14	0.87	1.07
26.DEC 14-DEC 27	1.24	1.20	1.15	0.84	1.04
27.DEC 28-JAN 10	1.19	1.15	1.15	0.85	1.05
28.JAN 11-JAN 24	1.12	0.97	1.03	0.71	0.91
29.JAN 25-FEB 07	1.06	1.11	1.05	0.72	0.92
30.FEB 08-FEB 21	0.91	1.00	0.95	0.63	0.83
31.FEB 22-MAR 06	1.07	1.02	1.00	0.70	0.90
32.MAR 07-MAR 20	1.01	1.01	1.03	0.56	0.76
33.MAR 21-APR 03	0.92	0.98	1.01	0.57	0.77
AVERAGE TO DATE	1.20	1.16	1.15	0.89	1.09
RANGE - LOW	0.91	0.97	0.95	0.56	0.76
TO DATE - HIGH	1.44	1.33	1.24	1.79	1.99
SAMPLES ABOVE LIMITS	7				
SAMPLES BELOW LIMITS	0				
% OUTSIDE LIMITS TO DATE	21.21%				
NUMBER OF SAMPLES TO DATE	33				

FLUORIDE CONTROL DATA - 1991/92

LOCATION - RESTON
CHEMICAL - NaF 4%
TEST KIT - Hach DR-2
NATURAL FLUORIDE 0.13

FLUORIDATOR -W&T A-745
OPERATOR - Ken Moore
TELEPHONE - 877-3862
CALCULATION - 6600

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	1.07	1.15	1.17	1.01	1.14
2.JAN 12-JAN 25	1.08	1.10	1.12	0.98	1.11
3.JAN 26-FEB 08	1.21	1.15	1.16	0.99	1.12
4.FEB 09-FEB 22	1.12	1.20	1.20	1.02	1.15
5.FEB 23-MAR 08	1.13	1.25	1.23	1.09	1.22
6.MAR 09-MAR 22	1.12	1.15	1.18	1.04	1.17
7.MAR 23-APR 05	1.00	1.22	1.22	1.03	1.16
8.APR 06-APR 19	1.15	1.20	1.20	1.01	1.14
9.APR 20-MAY 03	1.39	1.25	1.23	1.05	1.18
10.MAY 04-MAY 17	1.34	1.25	1.22	1.02	1.15
11.MAY 18-MAY 31	1.06	1.10	1.11	1.04	1.17
12.JUN 01-JUN 14	1.04	1.05	1.06	1.16	1.29
13.JUN 15-JUN 28	1.15	1.20	1.11	1.31	1.44
14.JUN 29-JUL 12	1.17	1.20	1.21	1.62	1.75
15.JUL 13-JUL 26	1.23	1.20	1.20	1.24	1.37
16.JUL 27-AUG 09	1.22	1.25	1.23	1.22	1.35
17.AUG 10-AUG 23	1.10	1.15	1.17	1.20	1.33
18.AUG 24-SEP 06	1.28	1.20	1.21	1.23	1.36
19.SEP 07-SEP 20	1.20	1.22	1.22	1.21	1.34
20.SEP 21-OCT 04	1.30	1.25	1.23	1.24	1.37
21.OCT 05-OCT 18	1.09	1.10	1.11	1.16	1.29
22.OCT 19-NOV 01	0.93	1.10	1.09	0.97	1.10
23.NOV 02-NOV 15	0.95	1.05	1.05	0.88	1.01
24.NOV 16-NOV 29	0.97	1.05	1.10	0.89	1.02
25.NOV 30-DEC 13	1.00	1.10	1.08	0.90	1.03
26.DEC 14-DEC 27	0.96	1.00	1.00	0.87	1.00
27.DEC 28-JAN 10	1.00	1.02	1.01	0.87	1.00
28.JAN 11-JAN 24	0.95	1.05	1.02	0.91	1.04
29.JAN 25-FEB 07	0.99	1.02	1.01	0.91	1.04
30.FEB 08-FEB 21	0.87	1.05	1.03	0.89	1.02
31.FEB 22-MAR 06	0.91	1.05	1.03	0.82	0.95
32.MAR 07-MAR 20	0.91	1.10	1.08	0.84	0.97
33.MAR 21-APR 03	0.90	1.00	1.01	0.87	1.00
AVERAGE TO DATE	1.08	1.13	1.13	1.04	1.17
RANGE - LOW	0.87	1.00	1.00	0.82	0.95
TO DATE - HIGH	1.39	1.25	1.23	1.62	1.75
SAMPLES ABOVE LIMITS	2				
SAMPLES BELOW LIMITS	0				
% OUTSIDE LIMITS TO DATE	6.06%				
NUMBER OF SAMPLES TO DATE	33				

NOTE: Reston converted from a batch mix system to an upflow saturator system April 1, 1992.

FLUORIDE CONTROL DATA - 1991/92

LOCATION - RIVERS
CHEMICAL - NaF 4%
TEST KIT - Hach DR-2000
NATURAL FLUORIDE 0.18

FLUORIDATOR -LMI Saturator
OPERATOR Jeff Worth
TELEPHONE - 328-7480
CALCULATION - 17600

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	0.92	0.90	0.72	0.75	0.93
2.JAN 12-JAN 25	0.69	0.80	0.89	0.62	0.80
3.JAN 26-FEB 08	0.71	1.00	0.82	0.55	0.73
4.FEB 09-FEB 22	0.58	0.70	0.78	0.39	0.57
5.FEB 23-MAR 08	0.55	0.90	0.81	0.53	0.71
6.MAR 09-MAR 22	1.04	1.20	1.13	1.34	1.52
7.MAR 23-APR 05	0.74	0.90	1.04	0.74	0.92
8.APR 06-APR 19	0.66	0.80	0.86	0.72	0.90
9.APR 20-MAY 03	0.65	0.80	0.82	0.61	0.79
10.MAY 04-MAY 17	0.60	0.60	0.81	0.79	0.97
11.MAY 18-MAY 31	0.90	0.90	0.89	1.01	1.19
12.JUN 01-JUN 14	0.91	0.90	0.99	1.11	1.29
13.JUN 15-JUN 28	0.84	0.90	0.91	1.04	1.22
14.JUN 29-JUL 12	0.88	0.80	0.86	0.92	1.10
15.JUL 13-JUL 26	0.80	1.00	0.81	1.02	1.20
16.JUL 27-AUG 09	0.80	0.90	0.91	0.73	0.91
17.AUG 10-AUG 23	NOT AVAIL	NOT AVAIL	0.00	NOT AVAIL	0.00
18.AUG 24-SEP 06	NOT AVAIL	NOT AVAIL	0.00	NOT AVAIL	0.00
19.SEP 07-SEP 20	2.40	2.19	1.94	0.47	0.65
20.SEP 21-OCT 04	2.60	2.24	1.88	0.38	0.56
21.OCT 05-OCT 18	0.75	0.91	1.06	1.37	1.55
22.OCT 19-NOV 01	1.09	1.22	1.01	1.23	1.41
23.NOV 02-NOV 15	0.71	0.88	0.96	1.37	1.55
24.NOV 16-NOV 29	0.64	0.76	0.99	NOT AVAIL	0.18
25.NOV 30-DEC 13	0.82	1.04	0.92	NOT AVAIL	0.00
26.DEC 14-DEC 27	0.68	0.95	0.97	0.87	1.05
27.DEC 28-JAN 10	0.71	0.93	0.93	0.87	1.05
28.JAN 11-JAN 24	NOT AVAIL	1.09	1.10	2.09	2.27
29.JAN 25-FEB 07	0.39	0.84	0.73	1.27	1.45
30.FEB 08-FEB 21	0.78	0.88	1.04	1.05	1.23
31.FEB 22-MAR 06	1.57	1.79	1.66	2.10	2.28
32.MAR 07-MAR 20	1.40	1.56	1.36	1.68	1.86
33.MAR 21-APR 03	0.69	1.06	0.85	0.50	0.68
AVERAGE TO DATE	0.92	1.04	1.01	0.97	1.12
RANGE - LOW	0.39	0.60	0.72	0.38	0.18
TO DATE - HIGH	2.60	2.24	1.94	2.10	2.28
SAMPLES ABOVE LIMITS	4				
SAMPLES BELOW LIMITS	16				
% OUTSIDE LIMITS TO DATE	66.67%				
NUMBER OF SAMPLES TO DATE	30				

NOTE: Fluctuating levels were related to general problems within the plant. Modifications to the plant were completed and levels will stabilize in 1992/93.

FLUORIDE CONTROL DATA - 1991/92

LOCATION - ROBLIN
CHEMICAL - NaF 4%
TEST KIT - Hach Spectrophotometer
NATURAL FLUORIDE 0.26

FLUORIDATOR -W&T A-745
OPERATOR - Nick Holopina
TELEPHONE - 937-2377
CALCULATION - 17600

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	1.07	1.15	1.11	1.05	1.31
2.JAN 12-JAN 25	1.15	1.10	1.11	1.08	1.34
3.JAN 26-FEB 08	1.28	1.15	1.15	0.87	1.13
4.FEB 09-FEB 22	1.12	1.15	1.15	0.94	1.20
5.FEB 23-MAR 08	1.07	1.15	1.14	1.12	1.38
6.MAR 09-MAR 22	1.16	1.15	1.16	0.96	1.22
7.MAR 23-APR 05	1.12	1.15	1.16	0.83	1.09
8.APR 06-APR 19	1.20	1.15	1.11	0.86	1.12
9.APR 20-MAY 03	1.15	1.10	1.11	1.01	1.27
10.MAY 04-MAY 17	0.92	1.05	1.08	0.78	1.04
11.MAY 18-MAY 31	1.16	1.20	1.17	0.85	1.11
12.JUN 01-JUN 14	1.15	1.10	1.14	1.05	1.31
13.JUN 15-JUN 28	1.23	1.15	1.16	1.45	1.71
14.JUN 29-JUL 12	1.20	1.15	1.13	1.23	1.49
15.JUL 13-JUL 26	1.23	1.15	1.18	1.12	1.38
16.JUL 27-AUG 09	0.71	1.10	1.11	0.86	1.12
17.AUG 10-AUG 23	1.20	1.15	1.11	0.96	1.22
18.AUG 24-SEP 06	1.16	1.15	1.16	1.20	1.46
19.SEP 07-SEP 20	1.13	1.10	1.11	1.09	1.35
20.SEP 21-OCT 04	1.35	NOT AVAIL	1.16	1.29	1.55
21.OCT 05-OCT 18	1.00	1.00	1.02	1.01	1.27
22.OCT 19-NOV 01	1.15	1.10	1.12	0.88	1.14
23.NOV 02-NOV 15	1.00	1.10	1.10	1.24	1.50
24.NOV 16-NOV 29	1.20	1.05	1.08	1.06	1.32
25.NOV 30-DEC 13	1.22	NOT AVAIL	1.09	1.03	1.29
26.DEC 14-DEC 27	1.35	1.10	1.11	0.91	1.17
27.DEC 28-JAN 10	1.39	1.15	1.10	1.07	1.33
28.JAN 11-JAN 24	1.28	1.15	1.13	1.02	1.28
29.JAN 25-FEB 07	1.12	1.10	1.11	0.99	1.25
30.FEB 08-FEB 21	1.27	1.15	1.10	1.07	1.33
31.FEB 22-MAR 06	1.07	1.05	1.06	0.36	0.62
32.MAR 07-MAR 20	1.10	1.05	1.05	0.94	1.20
33.MAR 21-APR 03	1.19	1.10	1.10	1.14	1.40
AVERAGE TO DATE	1.15	1.12	1.12	1.01	1.27
RANGE - LOW	0.71	1.00	1.02	0.36	0.62
TO DATE - HIGH	1.39	1.20	1.18	1.45	1.71

SAMPLES ABOVE LIMITS	3
SAMPLES BELOW LIMITS	1
% OUTSIDE LIMITS TO DATE	12.12%
NUMBER OF SAMPLES TO DATE	33

FLUORIDE CONTROL DATA - 1991/92

LOCATION - ROSENORT (R.M. OF MORRIS)
CHEMICAL - NaF 4%
TEST KIT - Hach DR-100
NATURAL FLUORIDE 0.29

FLUORIDATOR -LMI Saturator
OPERATOR - Brian Friesen
TELEPHONE - 746-8220
CALCULATION - 17600

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11					
2.JAN 12-JAN 25					
3.JAN 26-FEB 08					
4.FEB 09-FEB 22					
5.FEB 23-MAR 08					
6.MAR 09-MAR 22					
7.MAR 23-APR 05					
8.APR 06-APR 19					
9.APR 20-MAY 03					
10.MAY 04-MAY 17					
11.MAY 18-MAY 31					
12.JUN 01-JUN 14					
13.JUN 15-JUN 28					
14.JUN 29-JUL 12					
15.JUL 13-JUL 26					
16.JUL 27-AUG 09					
17.AUG 10-AUG 23					
18.AUG 24-SEP 06					
19.SEP 07-SEP 20					
20.SEP 21-OCT 04					
21.OCT 05-OCT 18					
22.OCT 19-NOV 01					
23.NOV 02-NOV 15					
24.NOV 16-NOV 29					
25.NOV 30-DEC 13					
26.DEC 14-DEC 27					
27.DEC 28-JAN 10					
28.JAN 11-JAN 24					
29.JAN 25-FEB 07					
30.FEB 08-FEB 21					
31.FEB 22-MAR 06	SYSTEM START-UP: PERIOD 32				
32.MAR 07-MAR 20	0.51	0.50	0.51	0.00	0.00
33.MAR 21-APR 03	0.76	0.85	0.84	0.00	0.00
AVERAGE TO DATE	0.64	0.68	0.68	ERR	ERR
RANGE - LOW	0.51	0.50	0.51	ERR	ERR
TO DATE - HIGH	0.76	0.85	0.84	ERR	ERR
SAMPLES ABOVE LIMITS	0				
SAMPLES BELOW LIMITS	2				
% OUTSIDE LIMITS TO DATE	100%				
NUMBER OF SAMPLES TO DATE	2				

FLUORIDE CONTROL DATA - 1991/92

LOCATION - ROSSBURN
CHEMICAL - NaF 4%
TEST KIT - Hach Spectrophotometer
NATURAL FLUORIDE 0.10

FLUORIDATOR -W&T A-745
OPERATOR - Doug Joiner
TELEPHONE - 859-2273
CALCULATION - 6600

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	1.17	1.16	1.16	0.81	0.91
2.JAN 12-JAN 25	1.22	1.16	1.16	0.81	0.91
3.JAN 26-FEB 08	1.11	1.15	1.16	0.97	1.07
4.FEB 09-FEB 22	1.20	1.16	1.16	0.79	0.89
5.FEB 23-MAR 08	1.15	1.16	1.16	0.73	0.83
6.MAR 09-MAR 22	1.04	1.15	1.15	0.74	0.84
7.MAR 23-APR 05	1.20	1.13	1.13	0.71	0.81
8.APR 06-APR 19	1.10	1.16	1.16	0.75	0.85
9.APR 20-MAY 03	1.17	1.13	1.13	0.82	0.92
10.MAY 04-MAY 17	1.11	1.12	1.12	0.76	0.86
11.MAY 18-MAY 31	1.03	NOT AVAIL	1.12	1.98	2.08
12.JUN 01-JUN 14	1.04	1.12	1.12	0.74	0.84
13.JUN 15-JUN 28	1.05	1.13	1.13	0.67	0.77
14.JUN 29-JUL 12	1.22	1.14	1.14	0.74	0.84
15.JUL 13-JUL 26	1.23	NOT AVAIL	1.13	0.69	0.79
16.JUL 27-AUG 09	1.27	1.14	1.14	0.71	0.81
17.AUG 10-AUG 23	1.24	NOT AVAIL	1.14	0.68	0.78
18.AUG 24-SEP 06	1.19	NOT AVAIL	1.14	0.74	0.84
19.SEP 07-SEP 20	0.91	NOT AVAIL	1.14	0.81	0.91
20.SEP 21-OCT 04	1.12	1.15	1.15	0.92	1.02
21.OCT 05-OCT 18	1.00	1.16	1.16	0.92	1.02
22.OCT 19-NOV 01	1.30	1.16	1.16	0.82	0.92
23.NOV 02-NOV 15	1.28	1.14	1.14	0.80	0.90
24.NOV 16-NOV 29	1.24	NOT AVAIL	1.11	0.79	0.89
25.NOV 30-DEC 13	1.47	1.30	1.28	1.15	1.25
26.DEC 14-DEC 27	1.00	1.17	1.17	0.65	0.75
27.DEC 28-JAN 10	0.85	1.14	1.14	0.58	0.68
28.JAN 11-JAN 24	0.72	1.12	1.12	0.60	0.70
29.JAN 25-FEB 07	0.68	1.12	1.12	0.59	0.69
30.FEB 08-FEB 21	0.67	NOT AVAIL	1.12	0.66	0.76
31.FEB 22-MAR 06	1.32	1.04	1.04	0.73	0.83
32.MAR 07-MAR 20	1.52	NOT AVAIL	1.10	0.77	0.87
33.MAR 21-APR 03	1.45	1.07	1.07	0.54	0.64
AVERAGE TO DATE	1.13	1.14	1.14	0.79	0.89
RANGE - LOW	0.67	1.04	1.04	0.54	0.64
TO DATE - HIGH	1.52	1.30	1.28	1.98	2.08
SAMPLES ABOVE LIMITS	4				
SAMPLES BELOW LIMITS	3				
% OUTSIDE LIMITS TO DATE	21.21%				
NUMBER OF SAMPLES TO DATE	33				

NOTE: **In December 1991, Rossburn converted from a batch mix to an upflow saturator system.**

FLUORIDE CONTROL DATA - 1991/92

LOCATION - RUSSELL
CHEMICAL - NaF 4%
TEST KIT - Hach DR-2
NATURAL FLUORIDE 0.21

FLUORIDATOR -W&T A-747
OPERATOR - H. Schrader
TELEPHONE - 773-3185
CALCULATION - 4400

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	1.05	1.10	1.14	0.90	1.11
2.JAN 12-JAN 25	1.17	1.10	1.16	0.86	1.07
3.JAN 26-FEB 08	1.03	1.10	1.13	0.87	1.08
4.FEB 09-FEB 22	1.12	1.10	1.17	0.92	1.13
5.FEB 23-MAR 08	1.12	1.10	1.19	1.02	1.23
6.MAR 09-MAR 22	1.12	1.15	1.20	0.98	1.19
7.MAR 23-APR 05	1.22	1.15	1.19	0.95	1.16
8.APR 06-APR 19	1.10	1.10	1.18	0.97	1.18
9.APR 20-MAY 03	1.12	1.15	1.18	0.96	1.17
10.MAY 04-MAY 17	1.03	1.20	1.17	1.02	1.23
11.MAY 18-MAY 31	1.20	1.20	1.19	0.94	1.15
12.JUN 01-JUN 14	1.17	1.20	1.20	1.04	1.25
13.JUN 15-JUN 28	1.06	1.10	1.20	0.98	1.19
14.JUN 29-JUL 14	1.18	1.15	1.23	0.90	1.11
15.JUL 13-JUL 26	1.09	1.15	1.14	0.91	1.12
16.JUL 27-AUG 09	1.15	1.20	1.18	1.14	1.35
17.AUG 10-AUG 23	1.06	1.10	1.13	0.86	1.07
18.AUG 24-SEP 06	1.11	1.15	1.20	0.94	1.15
19.SEP 07-SEP 20	1.19	1.20	1.23	0.95	1.16
20.SEP 21-OCT 04	1.23	1.20	1.22	0.96	1.17
21.OCT 05-OCT 18	1.05	1.00	1.10	0.72	0.93
22.OCT 19-NOV 01	1.00	1.00	1.02	0.84	1.05
23.NOV 02-NOV 15	1.00	1.00	1.03	0.78	0.99
24.NOV 16-NOV 29	1.05	1.00	1.05	0.86	1.07
25.NOV 30-DEC 13	0.95	1.00	1.01	0.73	0.94
26.DEC 14-DEC 27	0.85	0.95	0.94	0.48	0.69
27.DEC 28-JAN 10	1.05	1.15	1.10	0.43	0.64
28.JAN 11-JAN 24	1.12	1.00	1.09	0.49	0.70
29.JAN 25-FEB 07	1.00	1.10	1.04	0.44	0.65
30.FEB 08-FEB 21	0.99	1.00	1.02	0.46	0.67
31.FEB 22-MAR 06	0.90	0.95	0.99	0.38	0.59
32.MAR 07-MAR 20	1.04	1.00	1.02	0.25	0.46
33.MAR 21-APR 03	0.92	1.00	1.01	0.26	0.47
AVERAGE TO DATE	1.07	1.09	1.12	0.79	1.00
RANGE - LOW	0.85	0.95	0.94	0.25	0.46
TO DATE - HIGH	1.23	1.20	1.23	1.14	1.35
SAMPLES ABOVE LIMITS	0				
SAMPLES BELOW LIMITS	0				
% OUTSIDE LIMITS TO DATE	0.00%				
NUMBER OF SAMPLES TO DATE	33				

NOTE: Russell converted from a batch mix system to an upflow saturator system on March 6, 1992.

FLUORIDE CONTROL DATA - 1991/92

LOCATION - ST. JEAN
CHEMICAL - NaF 4%
TEST KIT - Hach DR-100
NATURAL FLUORIDE 0.22

FLUORIDATOR -LMI Saturator
OPERATOR - H. Benjamin
TELEPHONE - 758-3505
CALCULATION - 18000

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	1.04	1.10	1.20	0.70	0.92
2.JAN 12-JAN 25	1.04	1.50	1.19	0.46	0.68
3.JAN 26-FEB 08	1.12	1.25	1.20	0.85	1.07
4.FEB 09-FEB 22	1.00	1.20	1.03	1.01	1.23
5.FEB 23-MAR 08	1.20	1.25	1.21	0.67	0.89
6.MAR 09-MAR 22	1.11	1.20	1.20	0.91	1.13
7.MAR 23-APR 05	1.07	1.25	1.20	0.97	1.19
8.APR 06-APR 19	1.25	1.25	1.19	1.04	1.26
9.APR 20-MAY 03	1.32	1.25	1.18	0.85	1.07
10.MAY 04-MAY 17	1.15	1.18	1.20	1.06	1.28
11.MAY 18-MAY 31	1.13	1.20	1.17	1.17	1.39
12.JUN 01-JUN 14	1.05	1.20	1.21	1.39	1.61
13.JUN 15-JUN 28	0.95	1.15	1.20	2.24	2.46
14.JUN 29-JUL 12	0.92	1.00	1.18	1.17	1.39
15.JUL 13-JUL 26	1.07	1.25	1.17	1.44	1.66
16.JUL 27-AUG 09	1.20	1.00	1.22	0.56	0.78
17.AUG 10-AUG 23	1.39	1.20	1.21	0.97	1.19
18.AUG 24-SEP 06	1.39	1.25	1.21	0.77	0.99
19.SEP 07-SEP 20	1.12	1.25	1.21	0.73	0.95
20.SEP 21-OCT 04	1.18	1.20	1.22	0.88	1.10
21.OCT 05-OCT 18	1.07	1.25	1.21	0.71	0.93
22.OCT 19-NOV 01	1.05	1.10	1.20	0.81	1.03
23.NOV 02-NOV 15	1.19	1.20	1.21	0.93	1.15
24.NOV 16-NOV 29	1.19	1.20	1.20	1.08	1.30
25.NOV 30-DEC 13	0.75	1.20	1.15	0.77	0.99
26.DEC 14-DEC 27	1.23	NOT AVAIL	1.20	NOT AVAIL	0.00
27.DEC 28-JAN 10	1.24	1.20	1.20	1.60	1.82
28.JAN 11-JAN 24	1.07	1.15	1.20	2.67	2.89
29.JAN 25-FEB 07	1.08	NOT AVAIL	1.15	0.97	1.19
30.FEB 08-FEB 21	1.06	1.10	1.16	1.13	1.35
31.FEB 22-MAR 06	0.98	1.10	1.15	0.52	0.74
32.MAR 07-MAR 20	0.94	1.00	1.09	0.58	0.80
33.MAR 21-APR 03	0.93	1.10	1.00	0.51	0.73
AVERAGE TO DATE	1.11	1.18	1.18	1.00	1.22
RANGE - LOW	0.75	1.00	1.00	0.46	0.68
TO DATE - HIGH	1.39	1.50	1.22	2.67	2.89

SAMPLES ABOVE LIMITS	3
SAMPLES BELOW LIMITS	1
% OUTSIDE LIMITS TO DATE	12.12%
NUMBER OF SAMPLES TO DATE	33

FLUORIDE CONTROL DATA - 1991/92

LOCATION - STE. ROSE
CHEMICAL - NaF 4%
TEST KIT - Hach DR-3
NATURAL FLUORIDE 0.12

FLUORIDATOR -LMI - A741
OPERATOR - Don Luke
TELEPHONE - 477-2675
CALCULATION - 17600

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	1.15	1.18	1.15	0.84	0.96
2.JAN 12-JAN 25	0.46	0.44	0.58	1.00	1.12
3.JAN 26-FEB 08	0.83	0.78	0.79	1.12	1.24
4.FEB 09-FEB 22	1.00	1.11	0.98	1.13	1.25
5.FEB 23-MAR 08	0.38	NOT AVAIL	0.00	NOT AVAIL	0.00
6.MAR 09-MAR 22	1.25	1.17	1.16	1.32	1.44
7.MAR 23-APR 05	1.29	1.30	1.18	1.12	1.24
8.APR 06-APR 19	1.28	1.27	1.17	1.22	1.34
9.APR 20-MAY 03	1.26	1.25	1.15	1.13	1.25
10.MAY 04-MAY 17	1.30	1.11	1.12	1.08	1.20
11.MAY 18-MAY 31	1.10	1.12	1.13	0.97	1.09
12.JUN 01-JUN 14	0.96	0.95	1.04	1.18	1.30
13.JUN 15-JUN 28	1.06	1.12	1.21	1.42	1.54
14.JUN 29-JUL 12	1.17	1.08	1.13	0.91	1.03
15.JUL 13-JUL 26	1.03	0.95	0.91	1.26	1.38
16.JUL 27-AUG 09	1.00	0.90	0.92	2.38	2.50
17.AUG 10-AUG 23	1.12	1.03	1.02	0.87	0.99
18.AUG 24-SEP 06	1.14	1.37	1.32	1.01	1.13
19.SEP 07-SEP 20	0.87	1.17	1.10	0.72	0.84
20.SEP 21-OCT 04	0.75	0.90	0.98	0.67	0.79
21.OCT 05-OCT 18	0.90	1.02	1.02	0.75	0.87
22.OCT 19-NOV 01	0.84	0.69	0.77	0.98	1.10
23.NOV 02-NOV 15	0.85	0.76	0.75	0.95	1.07
24.NOV 16-NOV 29	0.99	0.85	0.81	0.92	1.04
25.NOV 30-DEC 13	1.11	0.96	1.00	0.71	0.83
26.DEC 14-DEC 27	0.86	1.01	0.90	0.71	0.83
27.DEC 28-JAN 10	0.88	0.99	0.96	0.76	0.88
28.JAN 11-JAN 24	0.88	1.15	1.06	1.05	1.17
29.JAN 25-FEB 07	0.95	1.15	1.09	0.92	1.04
30.FEB 08-FEB 21	0.88	1.12	1.05	1.01	1.13
31.FEB 22-MAR 06	0.71	0.86	1.03	0.52	0.64
32.MAR 07-MAR 20	0.93	0.82	0.93	1.05	1.17
33.MAR 21-APR 03	1.25	1.20	1.14	1.13	1.25
AVERAGE TO DATE	0.98	1.02	1.02	1.03	1.15
RANGE - LOW	0.38	0.44	0.58	0.52	0.64
TO DATE - HIGH	1.30	1.37	1.32	2.38	2.50
SAMPLES ABOVE LIMITS	0				
SAMPLES BELOW LIMITS	4				
% OUTSIDE LIMITS TO DATE	12.12%				
NUMBER OF SAMPLES TO DATE	33				

FLUORIDE CONTROL DATA - 1991/92

LOCATION - SANDY BAY
CHEMICAL - NaF 4%
TEST KIT - Hach DR-100
NATURAL FLUORIDE 0.22

FLUORIDATOR -LMI Saturator
OPERATOR - Ed Houle
TELEPHONE - 843-2431
CALCULATION - 18000

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	NOT AVAIL	NOT AVAIL	0.00	NOT AVAIL	0.00
2.JAN 12-JAN 25	0.53	0.90	0.91	0.15	0.37
3.JAN 26-FEB 08	0.58	0.90	0.83	0.17	0.39
4.FEB 09-FEB 22	0.55	1.10	0.89	0.16	0.38
5.FEB 23-MAR 08	0.56	0.90	0.92	0.22	0.44
6.MAR 09-MAR 22	0.59	0.80	0.92	0.16	0.38
7.MAR 23-APR 05	0.71	1.00	0.89	0.22	0.44
8.APR 06-APR 19	0.72	0.70	0.87	0.20	0.42
9.APR 20-MAY 03	NOT AVAIL	NOT AVAIL	0.00	NOT AVAIL	0.00
10.MAY 04-MAY 17	1.09	1.20	1.05	0.31	0.53
11.MAY 18-MAY 31	0.95	1.00	1.08	0.44	0.66
12.JUN 01-JUN 14	1.04	1.20	0.91	0.35	0.57
13.JUN 15-JUN 28	0.90	1.00	1.00	0.23	0.45
14.JUN 29-JUL 12	1.00	1.00	1.04	0.22	0.44
15.JUL 13-JUL 26	0.90	1.00	1.06	0.30	0.52
16.JUL 27-AUG 09	NOT AVAIL	NOT AVAIL	0.00	NOT AVAIL	0.00
17.AUG 10-AUG 23	0.84	1.10	0.96	0.28	0.50
18.AUG 24-SEP 06	NOT AVAIL	NOT AVAIL	0.00	NOT AVAIL	0.00
19.SEP 07-SEP 20	NOT AVAIL	NOT AVAIL	0.00	NOT AVAIL	0.00
20.SEP 21-OCT 04	1.00	1.00	1.03	0.24	0.46
21.OCT 05-OCT 18	1.13	1.10	1.08	0.23	0.45
22.OCT 19-NOV 01	1.30	1.40	1.18	0.02	0.24
23.NOV 02-NOV 15	1.50	1.20	1.22	0.05	0.27
24.NOV 16-NOV 29	0.98	1.00	1.06	NOT AVAIL	0.00
25.NOV 30-DEC 13	0.98	1.00	1.06	0.03	0.25
26.DEC 14-DEC 27	0.89	NOT AVAIL	0.00	NOT AVAIL	0.00
27.DEC 28-JAN 10	0.70	0.50	0.82	0.12	0.34
28.JAN 11-JAN 24	NOT AVAIL	NOT AVAIL	0.00	NOT AVAIL	0.00
29.JAN 25-FEB 07	0.99	0.90	1.04	0.21	0.43
30.FEB 08-FEB 21	1.05	0.90	0.99	0.35	0.57
31.FEB 22-MAR 06	1.04	1.30	1.01	0.26	0.48
32.MAR 07-MAR 20	NOT AVAIL	NOT AVAIL	0.00	NOT AVAIL	0.00
33.MAR 21-APR 03	1.05	1.00	1.02	0.03	0.25
AVERAGE TO DATE	0.91	1.00	0.99	0.21	0.43
RANGE - LOW	0.53	0.50	0.82	0.02	0.24
TO DATE - HIGH	1.50	1.40	1.22	0.44	0.66

SAMPLES ABOVE LIMITS	1
SAMPLES BELOW LIMITS	8
% OUTSIDE LIMITS TO DATE	34.62%
NUMBER OF SAMPLES TO DATE	26

FLUORIDE CONTROL DATA - 1991/92

LOCATION - SANFORD - R.M. OF MACDONALD
CHEMICAL - H2SiF6
TEST KIT - Hach DR-100
NATURAL FLUORIDE 0.1

FLUORIDATOR - W & T
OPERATOR - Keith Murphy
TELEPHONE - 736-4327
CALCULATION - 44000

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	1.25	1.23	1.22	1.13	1.23
2.JAN 12-JAN 25	1.17	1.20	1.19	1.11	1.21
3.JAN 26-FEB 08	1.20	1.21	1.22	1.13	1.23
4.FEB 09-FEB 22	1.07	1.18	1.19	1.07	1.17
5.FEB 23-MAR 08	1.17	1.12	1.17	1.08	1.18
6.MAR 09-MAR 22	1.08	1.13	1.15	1.09	1.19
7.MAR 23-APR 05	1.15	1.18	1.17	1.07	1.17
8.APR 06-APR 19	1.14	1.12	1.13	1.02	1.12
9.APR 20-MAY 03	1.09	1.04	1.03	1.05	1.15
10.MAY 04-MAY 17	1.05	1.09	1.08	1.09	1.19
11.MAY 18-MAY 31	1.12	1.04	1.07	1.11	1.21
12.JUN 01-JUN 14	1.25	1.14	1.13	1.21	1.31
13.JUN 15-JUN 28	1.16	1.19	1.16	1.08	1.18
14.JUN 29-JUL 12	1.14	1.18	1.18	1.04	1.14
15.JUL 13-JUL 26	1.10	1.15	1.14	1.04	1.14
16.JUL 27-AUG 09	1.17	1.13	1.85	1.05	1.15
17.AUG 10-AUG 23	1.11	1.22	1.20	1.03	1.13
18.AUG 24-SEP 06	1.07	1.14	1.13	1.04	1.14
19.SEP 07-SEP 20	1.25	1.18	1.19	1.13	1.23
20.SEP 21-OCT 04	1.15	1.21	1.18	1.10	1.20
21.OCT 05-OCT 18	1.07	1.09	1.09	0.98	1.08
22.OCT 19-NOV 01	0.95	0.99	1.02	0.88	0.98
23.NOV 02-NOV 15	0.92	1.01	0.92	0.86	0.96
24.NOV 16-NOV 29	0.97	1.02	1.03	0.84	0.94
25.NOV 30-DEC 13	0.90	1.01	1.00	0.85	0.95
26.DEC 14-DEC 27	0.92	0.99	0.99	0.86	0.96
27.DEC 28-JAN 10	1.00	1.00	1.00	0.88	0.98
28.JAN 11-JAN 24	1.00	1.06	1.03	0.91	1.01
29.JAN 25-FEB 07	0.95	1.03	1.02	0.87	0.97
30.FEB 08-FEB 21	0.95	0.99	0.99	0.82	0.92
31.FEB 22-MAR 06	0.93	1.01	1.00	0.74	0.84
32.MAR 07-MAR 20	0.94	1.00	1.01	0.82	0.92
33.MAR 21-APR 03	0.90	1.08	1.03	0.79	0.89
AVERAGE TO DATE	1.07	1.10	1.12	0.99	1.09
RANGE - LOW	0.90	0.99	0.92	0.74	0.84
TO DATE - HIGH	1.25	1.23	1.85	1.21	1.31
SAMPLES ABOVE LIMITS	0				
SAMPLES BELOW LIMITS	0				
% OUTSIDE LIMITS TO DATE	0.00%				
NUMBER OF SAMPLES TO DATE	33				

FLUORIDE CONTROL DATA - 1991/92

LOCATION - C.F.B. SHILO
CHEMICAL - Saturator 4%
TEST KIT - Hach Spectrophotometer
NATURAL FLUORIDE 0.05

FLUORIDATOR -LMI Saturator
OPERATOR - Bill Burke
TELEPHONE - 765-4723
CALCULATION - 17600

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	0.95	0.85	1.01	1.85	1.90
2.JAN 12-JAN 25	1.09	1.01	1.07	2.27	2.32
3.JAN 26-FEB 08	1.12	1.03	1.09	2.25	2.30
4.FEB 09-FEB 22	1.12	1.15	1.22	2.11	2.16
5.FEB 23-MAR 08	1.17	1.30	1.27	1.06	1.11
6.MAR 09-MAR 22	1.25	0.93	1.32	2.41	2.46
7.MAR 23-APR 05	1.18	0.91	1.22	0.55	0.60
8.APR 06-APR 19	1.15	1.37	1.36	2.39	2.44
9.APR 20-MAY 03	1.18	1.19	1.25	2.02	2.07
10.MAY 04-MAY 17	1.03	0.96	1.13	1.94	1.99
11.MAY 18-MAY 31	1.03	0.95	1.16	1.96	2.01
12.JUN 01-JUN 14	1.00	1.04	1.15	1.96	2.01
13.JUN 15-JUN 28	0.83	0.94	0.90	3.27	3.32
14.JUN 29-JUL 12	0.53	0.96	0.87	1.37	1.42
15.JUL 13-JUL 26	0.87	1.06	1.00	1.83	1.88
16.JUL 27-AUG 09	1.10	1.21	1.18	1.54	1.59
17.AUG 10-AUG 23	1.24	1.17	1.33	1.39	1.44
18.AUG 24-SEP 06	1.11	1.16	1.15	1.62	1.67
19.SEP 07-SEP 20	1.00	1.14	1.19	1.43	1.48
20.SEP 21-OCT 04	1.03	1.02	1.15	1.69	1.74
21.OCT 05-OCT 18	0.93	0.98	1.09	1.65	1.70
22.OCT 19-NOV 01	1.25	1.34	1.36	1.66	1.71
23.NOV 02-NOV 15	1.40	1.28	1.30	1.91	1.96
24.NOV 16-NOV 29	1.17	1.34	1.25	1.62	1.67
25.NOV 30-DEC 13	1.22	1.27	1.24	2.34	2.39
26.DEC 14-DEC 27	1.29	1.16	1.37	2.06	2.11
27.DEC 28-JAN 10	1.40	1.54	1.35	2.01	2.06
28.JAN 11-JAN 24	1.40	1.32	1.37	1.92	1.97
29.JAN 25-FEB 07	1.31	1.40	1.35	1.78	1.83
30.FEB 08-FEB 21	0.91	1.52	1.04	1.63	1.68
31.FEB 22-MAR 06	0.90	1.15	1.21	1.25	1.30
32.MAR 07-MAR 20	0.92	NOT AVAIL	1.27	NOT AVAIL	0.00
33.MAR 21-APR 03	0.80	1.18	0.90	0.63	0.68
AVERAGE TO DATE	1.09	1.15	1.19	1.79	1.84
RANGE - LOW	0.53	0.85	0.87	0.55	0.60
TO DATE - HIGH	1.40	1.54	1.37	3.27	3.32
SAMPLES ABOVE LIMITS	4				
SAMPLES BELOW LIMITS	1				
% OUTSIDE LIMITS TO DATE	15.15%				
NUMBER OF SAMPLES TO DATE	33				

FLUORIDE CONTROL DATA - 1991/92

LOCATION - SHOAL LAKE
CHEMICAL - NaF 4%
TEST KIT - Hach DR-3
NATURAL FLUORIDE 0.27

FLUORIDATOR -W&T Saturator
OPERATOR - John Michasiw
TELEPHONE - 759-2270
CALCULATION - 17600

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	0.95	0.87	0.88	0.63	0.90
2.JAN 12-JAN 25	0.96	0.95	0.69	0.79	1.06
3.JAN 26-FEB 08	1.15	0.91	0.94	0.73	1.00
4.FEB 09-FEB 22	1.10	0.96	0.96	0.72	0.99
5.FEB 23-MAR 08	1.07	0.98	0.97	0.73	1.00
6.MAR 09-MAR 22	1.07	0.91	0.97	0.71	0.98
7.MAR 23-APR 05	1.07	0.99	0.97	0.75	1.02
8.APR 06-APR 19	1.00	0.99	0.98	0.75	1.02
9.APR 20-MAY 03	1.00	1.00	0.99	0.73	1.00
10.MAY 04-MAY 17	0.95	1.02	1.02	0.80	1.07
11.MAY 18-MAY 31	0.90	1.01	1.02	0.72	0.99
12.JUN 01-JUN 14	0.95	0.95	1.01	0.68	0.95
13.JUN 15-JUN 28	0.90	0.97	1.01	0.68	0.95
14.JUN 29-JUL 12	0.91	0.99	1.01	0.70	0.97
15.JUL 13-JUL 26	0.90	0.98	1.01	0.71	0.98
16.JUL 27-AUG 09	0.91	0.95	0.99	0.69	0.96
17.AUG 10-AUG 23	0.84	0.91	1.00	0.65	0.92
18.AUG 24-SEP 06	0.86	1.00	0.98	0.74	1.01
19.SEP 07-SEP 20	0.88	0.93	0.97	0.68	0.95
20.SEP 21-OCT 04	0.95	0.95	0.94	0.68	0.95
21.OCT 05-OCT 18	0.88	0.90	0.93	0.66	0.93
22.OCT 19-NOV 01	0.85	0.96	0.96	0.70	0.97
23.NOV 02-NOV 15	0.91	0.89	0.93	0.67	0.94
24.NOV 16-NOV 29	1.00	0.90	0.87	0.66	0.93
25.NOV 30-DEC 13	1.00	0.90	0.89	0.68	0.95
26.DEC 14-DEC 27	0.75	0.89	0.87	0.63	0.90
27.DEC 28-JAN 10	0.73	0.91	0.89	0.68	0.95
28.JAN 11-JAN 24	0.75	0.99	0.88	0.73	1.00
29.JAN 25-FEB 07	0.82	0.89	0.90	0.65	0.92
30.FEB 08-FEB 21	0.99	0.92	0.87	0.64	0.91
31.FEB 22-MAR 06	0.90	0.90	0.81	0.70	0.97
32.MAR 07-MAR 20	0.85	0.96	0.89	0.68	0.95
33.MAR 21-APR 03	0.97	0.92	0.89	0.67	0.94
AVERAGE TO DATE	0.93	0.94	0.94	0.70	0.97
RANGE - LOW	0.73	0.87	0.69	0.63	0.90
TO DATE - HIGH	1.15	1.02	1.02	0.80	1.07
SAMPLES ABOVE LIMITS	0				
SAMPLES BELOW LIMITS	3				
% OUTSIDE LIMITS TO DATE	9.09%				
NUMBER OF SAMPLES TO DATE	33				

FLUORIDE CONTROL DATA - 1991/92

LOCATION - SNOW LAKE
CHEMICAL - H2SiF6 - 25%
TEST KIT - HACH DR100
RAW FLUORIDE - 0.1

FLUORIDATOR - Prom.Gamma IV
OPERATOR - E. Sorgenson
TELEPHONE - 358-7013
CALCULATION - 18900

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11				NOT AVAIL	0.10
2.JAN 12-JAN 25				NOT AVAIL	0.00
3.JAN 26-FEB 08				NOT AVAIL	0.00
4.FEB 09-FEB 22				NOT AVAIL	0.00
5.FEB 23-MAR 08				NOT AVAIL	0.00
6.MAR 09-MAR 22	System Start-up: Period 7			NOT AVAIL	0.00
7.MAR 23-APR 05	0.97	NOT AVAIL	0.00	NOT AVAIL	0.00
8.APR 06-APR 19	NOT AVAIL	NOT AVAIL	0.00	NOT AVAIL	0.00
9.APR 20-MAY 03	1.03	1.10	1.06	1.09	1.19
10.MAY 04-MAY 17	1.00	1.20	1.05	0.95	1.05
11.MAY 18-MAY 31	1.00	1.20	1.17	1.02	1.12
12.JUN 01-JUN 14	1.00	1.00	1.01	0.92	1.02
13.JUN 15-JUN 28	0.90	1.20	1.18	1.13	1.13
14.JUN 29-JUL 12	1.12	1.20	1.19	1.08	1.18
15.JUL 13-JUL 26	1.04	1.10	1.15	2.21	2.31
16.JUL 27-AUG 09	1.05	1.10	1.18	2.92	3.02
17.AUG 10-AUG 23	0.86	1.00	1.04	2.07	2.17
18.AUG 24-SEP 06	0.96	1.00	1.09	2.73	2.83
19.SEP 07-SEP 20	1.00	1.10	1.09	0.78	0.88
20.SEP 21-OCT 04	1.03	1.10	1.09	0.97	1.07
21.OCT 05-OCT 18	0.95	1.10	1.10	2.13	2.23
22.OCT 19-NOV 01	1.00	1.00	1.09	1.70	1.80
23.NOV 02-NOV 15	0.92	1.00	1.00	0.75	0.85
24.NOV 16-NOV 29	0.92	1.00	1.00	0.78	0.88
25.NOV 30-DEC 13	1.07	1.10	1.10	1.29	1.39
26.DEC 14-DEC 27	1.23	1.00	1.00	0.83	0.93
27.DEC 28-JAN 10	1.00	1.10	1.13	0.79	0.89
28.JAN 11-JAN 24	1.05	1.30	1.09	0.74	0.84
29.JAN 25-FEB 07	0.95	1.00	1.04	0.69	0.79
30.FEB 08-FEB 21	0.82	1.00	0.97	0.60	0.70
31.FEB 22-MAR 06	0.88	1.00	1.00	0.66	0.76
32.MAR 07-MAR 20	NOT AVAIL	NOT AVAIL	0.00	NOT AVAIL	0.00
33.MAR 21-APR 03	0.85	1.10	1.00	0.71	0.81
AVERAGE TO DATE	0.98	1.08	1.08	1.23	1.28
RANGE - LOW	0.82	1.00	0.97	0.60	0.10
TO DATE - HIGH	1.23	1.30	1.19	2.92	3.02
SAMPLES ABOVE LIMIT	0				
SAMPLES BELOW LIMIT	0				
% OUTSIDE LIMITS TO DATE	0.00%				
NUMBER OF SAMPLES TO DATE	25	24	24	24	25

FLUORIDE CONTROL DATA - 1991/92

LOCATION - SOURIS
CHEMICAL - NaF 4%
TEST KIT - Hach DR-2000
NATURAL FLUORIDE 0.19

FLUORIDATOR - LMI A751
OPERATOR - Bill Zander
TELEPHONE - 483-3096
CALCULATION - 17600

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	0.95	1.00	1.24	0.87	1.06
2.JAN 12-JAN 25	0.92	1.20	1.11	0.91	1.10
3.JAN 26-FEB 08	0.92	0.92	1.15	0.87	1.06
4.FEB 09-FEB 22	0.94	1.19	1.21	0.91	1.10
5.FEB 23-MAR 08	0.92	1.15	1.25	0.92	1.11
6.MAR 09-MAR 22	0.90	1.17	1.28	0.91	1.10
7.MAR 23-APR 05	0.83	1.10	1.20	0.77	0.96
8.APR 06-APR 19	0.80	1.00	1.22	0.69	0.88
9.APR 20-MAY 03	0.71	0.87	1.04	0.67	0.86
10.MAY 04-MAY 17	0.83	1.15	1.11	0.86	1.05
11.MAY 18-MAY 31	0.80	1.31	1.18	0.84	1.03
12.JUN 01-JUN 14	0.88	0.91	1.35	0.76	0.95
13.JUN 15-JUN 28	0.83	0.99	1.00	0.80	0.99
14.JUN 29-JUL 12	0.85	1.23	1.15	0.68	0.87
15.JUL 15-JUL 26	1.00	1.24	1.14	1.00	1.19
16.JUL 27-AUG 09	1.05	1.05	1.16	0.96	1.15
17.AUG 10-AUG 23	0.94	1.10	1.15	0.86	1.05
18.AUG 24-SEP 06	0.96	1.06	1.20	0.93	1.12
19.SEP 07-SEP 20	0.88	1.02	1.02	0.87	1.06
20.SEP 21-OCT 04	0.95	1.09	1.17	0.98	1.17
21.OCT 05-OCT 18	0.97	1.11	1.13	0.93	1.12
22.OCT 19-NOV 01	0.97	1.08	1.20	1.08	1.27
23.NOV 02-NOV 15	1.04	1.10	1.29	0.10	0.29
24.NOV 16-NOV 29	0.92	1.11	1.26	0.97	1.16
25.NOV 30-DEC 13	1.24	1.05	1.22	1.05	1.24
26.DEC 14-DEC 27	1.00	1.11	1.20	0.86	1.05
27.DEC 28-JAN 10	1.09	1.07	1.20	1.15	1.34
28.JAN 11-JAN 24	1.02	1.02	1.27	0.93	1.12
29.JAN 25-FEB 07	1.05	1.00	1.28	0.96	1.15
30.FEB 08-FEB 21	0.95	0.98	1.14	0.97	1.16
31.FEB 22-MAR 06	1.05	1.07	1.20	0.99	1.18
32.MAR 07-MAR 20	1.23	1.23	0.99	1.03	1.22
33.MAR 21-APR 03	1.15	1.17	1.42	0.92	1.11
AVERAGE TO DATE	0.96	1.09	1.19	0.88	1.07
RANGE - LOW	0.71	0.87	0.99	0.10	0.29
TO DATE - HIGH	1.24	1.31	1.42	1.15	1.34

SAMPLES ABOVE LIMITS	0
SAMPLES BELOW LIMITS	1
% OUTSIDE LIMITS TO DATE	3.03%
NUMBER OF SAMPLES TO DATE	33

FLUORIDE CONTROL DATA - 1991/92

LOCATION - STEINBACH
CHEMICAL - H2SiF6
TEST KIT - Hach DR-2000
NATURAL FLUORID 0.39

FLUORIDATOR - W&T
OPERATOR - Don Doyle
TELEPHONE - 326-3708
CALCULATION - 13200

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	0.72	0.89	0.90	0.36	0.75
2.JAN 12-JAN 25	0.85	0.93	0.91	0.41	0.80
3.JAN 26-FEB 08	0.86	0.97	0.97	0.49	0.88
4.FEB 09-FEB 22	0.97	0.89	0.90	0.51	0.90
5.FEB 23-MAR 08	1.05	1.04	1.04	0.53	0.92
6.MAR 09-MAR 22	0.94	0.94	0.94	0.51	0.90
7.MAR 23-APR 05	0.87	0.90	0.90	0.58	0.97
8.APR 06-APR 19	0.85	0.96	0.97	0.62	1.01
9.APR 20-MAY 03	0.95	0.98	0.98	0.52	0.91
10.MAY 04-MAY 17	0.90	0.96	0.96	0.28	0.67
11.MAY 18-MAY 31	0.90	1.00	1.00	0.45	0.84
12.JUN 01-JUN 14	0.91	0.94	0.94	0.38	0.77
13.JUN 15-JUN 28	0.71	0.89	0.90	0.31	0.70
14.JUN 29-JUL 12	0.94	0.93	0.93	0.26	0.65
15.JUL 13-JUL 26	0.94	1.23	1.23	0.39	0.78
16.JUL 27-AUG 09	0.74	1.00	0.94	NOT AVAIL	0.00
17.AUG 10-AUG 23	0.75	0.86	0.86	0.32	0.71
18.AUG 24-SEP 06	1.00	1.06	1.06	0.49	0.88
19.SEP 07-SEP 20	1.00	1.14	1.14	NOT AVAIL	0.00
20.SEP 21-OCT 04	1.10	1.17	1.18	0.46	0.85
21.OCT 05-OCT 18	1.09	1.10	1.18	0.61	1.00
22.OCT 19-NOV 01	1.10	1.10	1.12	0.40	0.79
23.NOV 02-NOV 15	1.00	1.09	1.09	0.41	0.80
24.NOV 16-NOV 29	1.03	1.14	1.15	0.41	0.80
25.NOV 30-DEC 13	1.05	1.00	0.98	0.47	0.86
26.DEC 14-DEC 27	0.98	0.91	0.92	0.41	0.80
27.DEC 28-JAN 10	0.97	0.84	0.84	0.38	0.77
28.JAN 11-JAN 24	1.12	1.00	1.01	0.56	0.95
29.JAN 25-FEB 07	1.12	0.95	0.95	0.54	0.93
30.FEB 08-FEB 21	1.20	1.15	1.15	0.53	0.92
31.FEB 22-MAR 06	1.12	1.20	1.23	0.60	0.99
32.MAR 07-MAR 20	1.14	1.20	1.21	0.50	0.89
33.MAR 21-APR 03	1.04	1.20	1.23	NOT AVAIL	0.00
AVERAGE TO DATE	0.97	1.02	1.02	0.46	0.85
RANGE - LOW	0.71	0.84	0.84	0.26	0.65
TO DATE - HIGH	1.20	1.23	1.23	0.62	1.01
SAMPLES ABOVE LIMIT	0				
SAMPLES BELOW LIMIT	4				
% OUTSIDE LIMITS TO DATE	12.12%				
NUMBER OF SAMPLES TO DATE	33				

NOTE: Steinbach converted from a batch mix system to an acid feed system in July 1991.

FLUORIDE CONTROL DATA - 1991/92

LOCATION - SWAN RIVER
CHEMICAL - H2SiF6
TEST KIT - Hach Spectrophotometer
NATURAL FLUORIDE 0.18

FLUORIDATOR -W&T 44-222
OPERATOR - Mel Phillips
TELEPHONE - 734-4628
CALCULATION - 13200

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	1.27	1.25	1.19	0.52	0.70
2.JAN 12-JAN 25	1.32	1.20	1.18	0.59	0.77
3.JAN 26-FEB 08	1.11	1.58	1.19	0.51	0.69
4.FEB 09-FEB 22	1.22	1.20	1.12	0.49	0.67
5.FEB 23-MAR 08	1.09	1.10	1.08	0.56	0.74
6.MAR 09-MAR 22	1.17	1.20	1.13	0.61	0.79
7.MAR 23-APR 05	1.18	1.20	1.18	0.64	0.82
8.APR 06-APR 19	1.10	1.20	1.19	0.60	0.78
9.APR 20-MAY 03	1.22	1.20	1.19	0.61	0.79
10.MAY 04-MAY 17	1.16	1.20	1.20	0.97	1.15
11.MAY 18-MAY 31	1.25	1.20	1.20	0.68	0.86
12.JUN 01-JUN 14	1.24	1.20	1.20	0.66	0.84
13.JUN 15-JUN 28	1.15	1.20	1.20	0.57	0.75
14.JUN 29-JUL 12	0.96	1.20	1.24	1.35	1.53
15.JUL 13-JUL 26	0.99	1.20	1.20	0.86	1.04
16.JUL 27-AUG 09	1.00	1.20	1.20	0.58	0.76
17.AUG 10-AUG 23	1.06	1.15	1.16	0.94	1.12
18.AUG 24-SEP 06	1.09	1.20	1.19	0.31	0.49
19.SEP 07-SEP 20	1.40	1.20	1.16	0.30	0.48
20.SEP 21-OCT 04	1.18	1.20	1.20	1.10	1.28
21.OCT 05-OCT 18	1.07	1.10	1.10	0.70	0.88
22.OCT 19-NOV 01	1.00	1.10	1.03	0.57	0.75
23.NOV 02-NOV 15	1.40	1.00	1.02	0.51	0.69
24.NOV 16-NOV 29	1.19	1.00	1.00	0.53	0.71
25.NOV 30-DEC 13	1.17	1.00	1.00	0.52	0.70
26.DEC 14-DEC 27	1.24	1.00	1.00	0.60	0.78
27.DEC 28-JAN 10	1.19	1.00	1.03	0.62	0.80
28.JAN 11-JAN 24	1.16	1.00	1.01	0.66	0.84
29.JAN 25-FEB 07	1.20	1.00	1.00	0.57	0.75
30.FEB 08-FEB 21	1.10	1.00	1.00	0.59	0.77
31.FEB 22-MAR 06	1.12	1.15	1.06	0.60	0.78
32.MAR 07-MAR 20	1.00	1.00	1.00	0.39	0.57
33.MAR 21-APR 03	CONTAMINATED	1.10	1.10	0.06	0.24
AVERAGE TO DATE	1.16	1.14	1.12	0.62	0.80
RANGE - LOW	0.96	1.00	1.00	0.06	0.24
TO DATE - HIGH	1.40	1.58	1.24	1.35	1.53
SAMPLES ABOVE LIMITS	3				
SAMPLES BELOW LIMITS	0				
% OUTSIDE LIMITS TO DATE	9.38%				
NUMBER OF SAMPLES TO DATE	32				

FLUORIDE CONTROL DATA - 1991/92

LOCATION - THE PAS
CHEMICAL - Na2SiF6 (Dry)
TEST KIT - Hach DR-100
NATURAL FLUORIDE 0.15

FLUORIDATOR -W&T 32-050
OPERATOR - Russ Yachiw
TELEPHONE - 623-6338
CALCULATION - 60000

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	1.10	1.05	1.05	1.07	1.22
2.JAN 12-JAN 25	1.43	1.28	1.28	1.46	1.61
3.JAN 26-FEB 08	1.16	1.12	1.12	1.16	1.31
4.FEB 09-FEB 22	1.09	1.10	1.09	0.60	0.75
5.FEB 23-MAR 08	1.20	1.15	1.07	1.28	1.43
6.MAR 09-MAR 22	1.06	1.05	0.87	1.15	1.30
7.MAR 23-APR 05	1.35	1.22	1.20	1.31	1.46
8.APR 06-APR 19	1.19	1.10	1.13	1.14	1.29
9.APR 20-MAY 03	1.18	1.17	1.14	1.10	1.25
10.MAY 04-MAY 17	1.16	1.15	1.05	1.27	1.42
11.MAY 18-MAY 31	1.15	1.12	1.07	1.05	1.20
12.JUN 01-JUN 14	1.15	1.11	1.11	1.00	1.15
13.JUN 15-JUN 28	1.00	1.00	0.94	0.74	0.89
14.JUN 29-JUL 12	1.22	1.18	1.01	0.87	1.02
15.JUL 13-JUL 26	1.07	1.13	1.14	1.23	1.38
16.JUL 27-AUG 09	1.34	1.28	1.27	0.61	0.76
17.AUG 10-AUG 23	1.10	1.10	1.08	0.19	0.34
18.AUG 24-SEP 06	1.16	1.18	1.15	1.08	1.23
19.SEP 07-SEP 20	1.12	1.18	1.14	1.06	1.21
20.SEP 21-OCT 04	1.03	1.10	1.07	0.89	1.04
21.OCT 05-OCT 18	1.07	1.12	1.05	1.02	1.17
22.OCT 19-NOV 01	0.60	0.61	0.62	0.54	0.69
23.NOV 02-NOV 15	1.05	1.00	1.07	0.94	1.09
24.NOV 16-NOV 29	1.00	0.98	0.93	1.03	1.18
25.NOV 30-DEC 13	1.07	1.05	1.08	1.10	1.25
26.DEC 14-DEC 27	1.13	1.05	1.04	1.27	1.42
27.DEC 28-JAN 10	1.09	1.10	1.11	1.14	1.29
28.JAN 11-JAN 24	0.95	0.95	0.86	0.81	0.96
29.JAN 25-FEB 07	0.95	0.95	0.95	0.86	1.01
30.FEB 08-FEB 21	1.02	1.00	1.00	0.92	1.07
31.FEB 22-MAR 06	1.02	0.91	0.94	1.08	1.23
32.MAR 07-MAR 20	1.09	1.05	1.06	0.97	1.12
33.MAR 21-APR 03	1.05	1.08	1.08	0.63	0.78
AVERAGE TO DATE	1.10	1.08	1.05	0.99	1.14
RANGE - LOW	0.60	0.61	0.62	0.19	0.34
TO DATE - HIGH	1.43	1.28	1.28	1.46	1.61

SAMPLES ABOVE LIMITS	3
SAMPLES BELOW LIMITS	1
% OUTSIDE LIMITS TO DATE	12.12%
NUMBER OF SAMPLES TO DATE	33

FLUORIDE CONTROL DATA - 1991/92

LOCATION - TREHERNE
CHEMICAL - NaF 4%
TEST KIT - Hach DR-100
NATURAL FLUORIDE 0.32

FLUORIDATOR -W&T A-745
OPERATOR - D. Lounsbury
TELEPHONE - 723-2044
CALCULATION - 18000

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	1.20	1.20	1.05	0.78	1.10
2.JAN 12-JAN 25	1.12	1.15	1.15	1.39	1.71
3.JAN 26-FEB 08	1.16	1.20	1.18	1.02	1.34
4.FEB 09-FEB 22	1.12	1.20	1.12	1.13	1.45
5.FEB 23-MAR 08	1.12	1.10	1.15	1.31	1.63
6.MAR 09-MAR 22	1.14	1.00	1.11	0.97	1.29
7.MAR 23-APR 05	1.15	1.10	1.12	1.05	1.37
8.APR 06-APR 19	1.00	1.00	1.09	0.20	0.52
9.APR 20-MAY 03	1.05	1.15	1.17	0.90	1.22
10.MAY 04-MAY 17	1.06	1.10	1.10	1.07	1.39
11.MAY 18-MAY 31	1.12	1.10	1.07	1.03	1.35
12.JUN 01-JUN 14	1.09	1.10	1.06	0.88	1.20
13.JUN 15-JUN 28	1.07	1.00	1.07	1.28	1.60
14.JUN 29-JUL 12	1.17	1.10	1.11	1.46	1.78
15.JUL 13-JUL 26	1.22	1.20	1.19	1.25	1.57
16.JUL 27-AUG 09	1.00	1.00	1.11	0.77	1.09
17.AUG 10-AUG 23	1.04	1.10	1.10	1.25	1.57
18.AUG 24-SEP 06	1.03	1.10	1.08	0.76	1.08
19.SEP 07-SEP 20	1.19	1.10	1.00	1.57	1.89
20.SEP 21-OCT 04	1.27	1.10	1.08	1.05	1.37
21.OCT 05-OCT 18	1.13	1.10	1.06	1.46	1.78
22.OCT 19-NOV 01	1.10	1.10	1.06	0.84	1.16
23.NOV 02-NOV 15	1.05	1.10	1.07	1.33	1.65
24.NOV 16-NOV 29	1.15	1.10	1.10	0.87	1.19
25.NOV 30-DEC 13	1.14	1.10	1.09	1.51	1.83
26.DEC 14-DEC 27	1.14	1.10	1.10	0.91	1.23
27.DEC 28-JAN 10	1.05	1.10	1.10	0.70	1.02
28.JAN 11-JAN 24	0.66	1.10	1.13	0.97	1.29
29.JAN 25-FEB 07	1.30	1.10	1.11	1.02	1.34
30.FEB 08 FEB 21	1.03	1.10	1.09	0.96	1.28
31.FEB 22-MAR 06	1.26	1.10	1.11	0.70	1.02
32.MAR 07-MAR 20	1.35	1.10	1.16	0.77	1.09
33.MAR 21-APR 03	1.25	1.10	1.18	1.64	1.96
AVERAGE TO DATE	1.12	1.10	1.11	1.05	1.37
RANGE - LOW	0.66	1.00	1.00	0.20	0.52
TO DATE - HIGH	1.35	1.20	1.19	1.64	1.96
SAMPLES ABOVE LIMITS	1				
SAMPLES BELOW LIMITS	1				
% OUTSIDE LIMITS TO DATE	6.06%				
NUMBER OF SAMPLES TO DATE	33				

FLUORIDE CONTROL DATA - 1991/92

LOCATION - VIRDEN
CHEMICAL - NaF 4%
TEST KIT - Hach DR-100
NATURAL FLUORIDE 0.44

FLUORIDATOR - LMI A751
OPERATOR - Dave Penney
TELEPHONE - 748-3074
CALCULATION - 17600

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	1.31	1.23	1.26	1.00	1.44
2.JAN 12-JAN 25	1.55	1.35	1.41	1.52	1.96
3.JAN 26-FEB 08	1.00	0.92	0.92	1.63	2.07
4.FEB 09-FEB 22	1.25	1.12	1.12	0.89	1.33
5.FEB 23-MAR 08	1.05	0.90	0.98	0.71	1.15
6.MAR 09-MAR 22	1.07	1.09	1.09	0.84	1.28
7.MAR 23-APR 05	1.24	1.12	1.12	0.91	1.35
8.APR 06-APR 19	1.23	1.11	1.12	0.89	1.33
9.APR 20-MAY 03	1.18	1.15	1.15	0.82	1.26
10.MAY 04-MAY 17	1.12	1.00	1.04	0.93	1.37
11.MAY 18-MAY 31	1.20	1.16	1.16	0.89	1.33
12.JUN 01-JUN 14	1.65	1.20	1.14	0.91	1.35
13.JUN 15-JUN 28	1.13	1.17	1.17	0.84	1.28
14.JUN 29-JUL 12	0.96	1.30	1.13	1.94	2.38
15.JUL 13-JUL 26	1.00	1.12	1.12	0.79	1.23
16.JUL 27-AUG 09	0.98	1.16	1.16	0.77	1.21
17.AUG 10-AUG 23	1.06	1.24	1.24	0.76	1.20
18.AUG 24-SEP 06	1.04	1.16	1.16	0.95	1.39
19.SEP 07-SEP 20	0.80	1.11	1.13	0.84	1.28
20.SEP 21-OCT 04	1.00	1.30	1.30	0.81	1.25
21.OCT 05-OCT 18	1.09	1.14	1.14	0.80	1.24
22.OCT 19-NOV 01	1.05	1.15	1.16	0.89	1.33
23.NOV 02-NOV 15	1.90	1.18	1.27	0.91	1.35
24.NOV 16-NOV 29	1.08	1.20	1.12	0.86	1.30
25.NOV 30-DEC 13	0.92	1.10	1.10	NOT AVAIL	0.44
26.DEC 14-DEC 27	0.81	1.15	1.05	0.67	1.11
27.DEC 28-JAN 10	1.28	1.23	1.24	0.94	1.38
28.JAN 11-JAN 24	1.18	1.18	1.18	0.85	1.29
29.JAN 25-FEB 07	1.19	1.19	1.19	0.88	1.32
30.FEB 08-FEB 21	1.25	1.16	1.17	NOT AVAIL	0.00
31.FEB 22-MAR 06	1.21	1.16	1.10	0.79	1.23
32.MAR 07-MAR 20	1.34	1.18	1.19	1.00	1.44
33.MAR 21-APR 03	1.17	1.11	1.12	0.81	1.25
AVERAGE TO DATE	1.16	1.15	1.15	0.94	1.35
RANGE - LOW	0.80	0.90	0.92	0.67	0.44
TO DATE - HIGH	1.90	1.35	1.41	1.94	2.38

SAMPLES ABOVE LIMITS	5
SAMPLES BELOW LIMITS	0
% OUTSIDE LIMITS TO DATE	15.15%
NUMBER OF SAMPLES TO DATE	33

FLUORIDE CONTROL DATA - 1991/92

LOCATION - WABOWDEN
CHEMICAL - NaF 4%
TEST KIT - Hach DR-100
NATURAL FLUORIDE 0.10

FLUORIDATOR -LMI Saturator
OPERATOR - Jack McIvor
TELEPHONE - 689-2223
CALCULATION - 18000

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	0.95	1.10	0.95	0.26	0.36
2.JAN 12-JAN 25	0.85	1.01	1.09	1.43	1.53
3.JAN 26-FEB 08	0.61	0.72	0.74	2.05	2.15
4.FEB 09-FEB 22	1.22	1.29	1.21	0.94	1.04
5.FEB 23-MAR 08	1.05	1.21	1.12	0.46	0.56
6.MAR 09-MAR 22	1.10	0.94	1.06	1.38	1.48
7.MAR 23-APR 05	1.18	1.14	1.06	1.43	1.53
8.APR 06-APR 19	0.90	0.96	1.03	1.83	1.93
9.APR 20-MAY 03	1.25	1.21	1.15	1.28	1.38
10.MAY 04-MAY 17	1.16	1.13	1.24	1.29	1.39
11.MAY 18-MAY 31	1.06	1.10	1.14	1.05	1.15
12.JUN 01-JUN 14	1.20	1.19	1.16	NOT AVAIL	0.00
13.JUN 15-JUN 28	1.13	1.10	1.16	NOT AVAIL	0.00
14.JUN 29-JUL 12	0.65	1.12	0.84	NOT AVAIL	0.00
15.JUL 13-JUL 26	1.55	1.30	1.19	NOT AVAIL	0.00
16.JUL 27-AUG 09	1.00	0.89	0.89	NOT AVAIL	0.00
17.AUG 10-AUG 23	0.45	0.42	0.73	NOT AVAIL	0.00
18.AUG 24-SEP 06	0.33	0.52	0.65	1.66	1.76
19.SEP 07-SEP 20	0.60	0.72	0.82	1.28	1.38
20.SEP 21-OCT 04	0.85	1.01	0.87	1.67	1.77
21.OCT 05-OCT 18	0.35	0.20	0.65	0.63	0.73
22.OCT 19-NOV 01	0.19	0.21	0.60	0.40	0.50
23.NOV 02-NOV 15	0.80	1.00	1.08	NOT AVAIL	0.00
24.NOV 16-NOV 29	1.25	1.41	1.25	1.92	2.02
25.NOV 30-DEC 13	0.68	0.60	0.77	NOT AVAIL	0.00
26.DEC 14-DEC 27	NOT AVAIL	0.76	0.90	NOT AVAIL	0.00
27.DEC 28-JAN 10	0.55	0.90	0.77	NOT AVAIL	0.00
28.JAN 11-JAN 24	0.36	0.60	0.69	NOT AVAIL	0.00
29.JAN 25-FEB 07	0.49	0.70	0.74	NOT AVAIL	0.00
30.FEB 08-FEB 21	0.28	0.74	0.76	NOT AVAIL	0.00
31.FEB 22-MAR 06	0.43	0.50	0.72	NOT AVAIL	0.10
32.MAR 07-MAR 20	0.23	0.34	0.55	NOT AVAIL	0.00
33.MAR 21-APR 03	NOT AVAIL	NOT AVAIL	0.00	NOT AVAIL	0.00
AVERAGE TO DATE	0.80	0.88	0.92	1.23	1.26
RANGE - LOW	0.19	0.20	0.55	0.26	0.10
TO DATE - HIGH	1.55	1.41	1.25	2.05	2.15

SAMPLES ABOVE LIMITS	1
SAMPLES BELOW LIMITS	14
% OUTSIDE LIMITS TO DATE	48.39%
NUMBER OF SAMPLES TO DATE	31

NOTE: Low readings were related to equipment malfunction which were rectified in early April 1992.

FLUORIDE CONTROL DATA - 1991/92

LOCATION - WINKLER
CHEMICAL - NaF 3%
TEST KIT - Hach Spectrophotometer DR-2000
NATURAL FLUORIDE 0.26

FLUORIDATOR -W7T A-747
OPERATOR - Lou Loewen
TELEPHONE - 325-9524
CALCULATION - 13200

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	1.25	1.14	1.12	0.85	1.11
2.JAN 12-JAN 25	1.25	1.21	1.23	0.84	1.10
3.JAN 26-FEB 08	1.11	1.18	1.12	0.80	1.06
4.FEB 09-FEB 22	1.15	1.10	1.22	0.79	1.05
5.FEB 23-MAR 08	0.96	1.20	1.11	0.71	0.97
6.MAR 09-MAR 22	0.98	0.91	1.04	0.63	0.89
7.MAR 23-APR 05	1.04	1.01	0.95	0.76	1.02
8.APR 06-APR 19	1.10	1.02	1.05	0.82	1.08
9.APR 20-MAY 03	1.05	0.99	0.99	0.84	1.10
10.MAY 04-MAY 17	1.13	0.95	0.91	0.83	1.09
11.MAY 18-MAY 31	1.09	1.12	0.97	0.87	1.13
12.JUN 01-JUN 14	1.15	1.08	0.95	0.86	1.12
13.JUN 15-JUN 28	1.08	1.07	1.07	0.87	1.13
14.JUN 29-JUL 12	1.18	1.21	1.15	0.89	1.15
15.JUL 13-JUL 26	1.18	1.16	1.13	0.88	1.14
16.JUL 27-AUG 09	0.95	0.98	1.06	0.74	1.00
17.AUG 10-AUG 23	1.03	1.00	1.02	0.73	0.99
18.AUG 24-SEP 06	1.22	1.19	1.10	0.78	1.04
19.SEP 07-SEP 20	1.16	1.19	1.15	0.78	1.04
20.SEP 21-OCT 04	1.24	1.18	1.17	0.75	1.01
21.OCT 05-OCT 18	1.23	1.12	1.14	0.75	1.01
22.OCT 19-NOV 01	1.25	1.27	1.16	0.75	1.01
23.NOV 02-NOV 15	1.14	0.97	1.14	0.72	0.98
24.NOV 16-NOV 29	0.88	0.90	1.03	0.65	0.91
25.NOV 30-DEC 13	0.94	0.96	1.06	0.70	0.96
26.DEC 14-DEC 27	1.05	1.09	0.94	0.75	1.01
27.DEC 28-JAN 10	1.00	1.02	1.09	0.75	1.01
28.JAN 11-JAN 24	1.08	1.01	1.17	0.75	1.01
29.JAN 25-FEB 07	1.00	0.86	0.95	0.74	1.00
30.FEB 08-FEB 21	1.00	1.10	1.06	0.73	0.99
31.FEB 22-MAR 06	1.04	0.92	0.97	0.72	0.98
32.MAR 07-MAR 20	1.01	1.19	1.20	0.71	0.97
33.MAR 21-APR 03	1.00	0.97	1.02	0.79	1.05
AVERAGE TO DATE	1.09	1.07	1.07	0.77	1.03
RANGE - LOW	0.88	0.86	0.91	0.63	0.89
TO DATE - HIGH	1.25	1.27	1.23	0.89	1.15
SAMPLES ABOVE LIMITS	0				
SAMPLES BELOW LIMITS	0				
% OUTSIDE LIMITS TO DATE	0.00%				
NUMBER OF SAMPLES TO DATE	33				

FLUORIDE CONTROL DATA - 1991/92

LOCATION - WINNIPEG
CHEMICAL - H2SiF6 25%
TEST KIT - Specific Ion Electrode
NATURAL FLUORIDE 0.1

FLUORIDATOR -W&T
OPERATOR - T. Hutchinson
TELEPHONE - 986-4781
CALCULATION - 0.2054

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	0.12				
2.JAN 12-JAN 25	0.10				
3.JAN 26-FEB 08	0.11				
4.FEB 09-FEB 22	0.12				
5.FEB 23-MAR 08	0.28				
6.MAR 09-MAR 22	0.60				
7.MAR 23-APR 05	0.86				
8.APR 06-APR 19	0.94				
9.APR 20-MAY 03	0.95				
10.MAY 04-MAY 17	0.90				
11.MAY 18-MAY 31	0.90				
12.JUN 01-JUN 14	0.82	The City of Winnipeg conducts its own analysis of water from 19 different sites as well as submitting a bi-weekly composite sample to Dental Health/Manitoba Health.			
13.JUN 15-JUN 28	0.84				
14.JUN 29-JUL 12	0.94				
15.JUL 13-JUL 26	1.03				
16.JUL 27-AUG 09	1.00				
17.AUG 10-AUG 23	1.00				
18.AUG 24-SEP 06	1.00				
19.SEP 07-SEP 20	1.00				
20.SEP 21-OCT 04	1.03				
21.OCT 05-OCT 18	1.05				
22.OCT 19-NOV 01	1.00				
23.NOV 02-NOV 15	1.07				
24.NOV 16-NOV 29	0.92				
25.NOV 30-DEC 13	0.87				
26.DEC 14-DEC 27	1.05				
27.DEC 28-JAN 10	1.05				
28.JAN 11-JAN 24	1.07				
29.JAN 25-FEB 07	1.07				
30.FEB 08-FEB 21	1.06				
31.FEB 22-MAR 06	1.07				
32.MAR 07-MAR 20	1.04				
33.MAR 21-APR 03	1.00				
AVERAGE TO DATE	0.84				
RANGE - LOW	0.10				
TO DATE - HIGH	1.07				
SAMPLES ABOVE LIMITS	0				
SAMPLES BELOW LIMITS	6				
% OUTSIDE LIMITS TO DATE	18.18%				
NUMBER OF SAMPLES TO DATE	33				

NOTE: Low readings at the beginning of the year were prior to the installation and start up of the redesigned fluoridation system.

FLUORIDE CONTROL DATA - 1991/92

LOCATION - WINNIPEGOSIS
CHEMICAL - NaF 4%
TEST KIT - Hach DR-100
NATURAL FLUORIDE 0.15

FLUORIDATOR -LMI Saturator
OPERATOR - Ron Pascal
TELEPHONE - 656-4345
CALCULATION - 18000

SAMPLING PERIOD	COMPOSITE (LAB)	COMPOSITE (OPERATOR)	AVERAGE DAILY	CALCULATED FEED	THEORETICAL DOSAGE
1.DEC 29-JAN 11	0.95	0.98	0.98	0.16	0.31
2.JAN 12-JAN 25	1.00	0.89	0.95	0.26	0.41
3.JAN 26-FEB 08	0.90	0.95	0.92	0.12	0.27
4.FEB 09-FEB 22	1.10	1.00	1.01	0.75	0.90
5.FEB 23-MAR 08	0.98	1.01	0.99	0.54	0.69
6.MAR 09-MAR 22	1.04	1.00	0.97	0.78	0.93
7.MAR 23-APR 05	1.14	1.09	1.03	1.42	1.57
8.APR 06-APR 19	0.86	0.92	0.94	0.87	1.02
9.APR 20-MAY 03	1.03	0.99	1.02	0.37	0.52
10.MAY 04-MAY 17	1.09	1.00	1.05	0.17	0.32
11.MAY 18-MAY 31	1.05	1.01	1.01	0.33	0.48
12.JUN 01-JUN 14	0.97	0.97	0.97	0.12	0.27
13.JUN 15-JUN 28	1.08	1.04	1.01	0.15	0.30
14.JUN 29-JUL 12	1.05	1.08	1.01	0.10	0.25
15.JUL 13-JUL 26	1.00	1.00	0.98	0.09	0.24
16.JUL 27-AUG 09	1.20	1.14	1.08	0.10	0.25
17.AUG 10-AUG 23	1.15	1.08	1.04	0.10	0.25
18.AUG 24-SEP 06	1.12	1.00	1.00	0.12	0.27
19.SEP 07-SEP 20	1.19	1.10	1.07	0.11	0.26
20.SEP 21-OCT 04	1.23	1.10	1.08	0.08	0.23
21.OCT 05-OCT 18	1.13	1.06	1.02	0.21	0.36
22.OCT 19-NOV 01	1.10	1.02	0.96	0.14	0.29
23.NOV 02-NOV 15	1.09	1.00	0.93	0.07	0.22
24.NOV 16-NOV 29	1.00	0.94	0.97	0.14	0.29
25.NOV 30-DEC 13	1.04	1.06	1.03	0.23	0.38
26.DEC 14-DEC 27	1.19	1.02	1.04	0.06	0.21
27.DEC 28-JAN 10	1.57	0.96	1.01	0.25	0.40
28.JAN 11-JAN 24	1.29	0.98	1.05	0.11	0.26
29.JAN 25-FEB 07	1.00	1.00	1.02	0.10	0.25
30.FEB 08-FEB 21	0.91	0.92	1.02	0.16	0.31
31.FEB 22-MAR 06	0.80	0.40	0.00	0.08	0.23
32.MAR 07-MAR 20	0.96	0.92	0.89	0.08	0.23
33.MAR 21-APR 03	0.98	0.98	1.00	0.15	0.30
AVERAGE TO DATE	1.07	0.99	1.00	0.26	0.41
RANGE - LOW	0.80	0.40	0.89	0.06	0.21
TO DATE - HIGH	1.57	1.14	1.08	1.42	1.57
SAMPLES ABOVE LIMITS	1				
SAMPLES BELOW LIMITS	0				
% OUTSIDE LIMITS TO DATE	3.03%				
NUMBER OF SAMPLES TO DATE	33				